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ABSTRACT

The St. Louis Board of Education found that too few students were willing to transfer to the centrally located O'Fallon Technical High School because of ties with neighborhood schools and because of the high percentage of Negro students attending O'Fallon. To solve these problems the Board received a 3-year Title III grant to institute a new approach whereby students divided their time equally between their neighborhood school and O'Fallon, and a racial balance was established and maintained among freshmen entering the program. Students of all ability levels were recruited, course offerings were diversified, and special emphasis was placed on promoting vocational education at O'Fallon. Based on questionnaire and enrollment data gathered to summarize and evaluate the new program's first year it was found that progress had been made toward achieving a balanced student population based on race, culture, and ability. It was also found that while some progress had been made in the area of vocational guidance much more needed to be done. (JS)

OE/BESE
TITLE III

ED042881

FINAL REPORT

FOR THE YEAR
JULY 1, 1968 - JULY 25, 1969

A PLAN TO INCREASE VOCATIONAL EDUCATION OPPORTUNITIES THROUGH THE EXPANSION OF CURRICULUM AND AVAILABLE FACILITIES

PROJECT NO. 68-06150-0
TITLE III, ELEMENTARY AND SECONDARY EDUCATION ACT
OF 1965

THE BOARD OF EDUCATION
OF THE CITY OF
ST. LOUIS, MISSOURI

October 1969

VT010323

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OFFICE OF EDUCATION
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ED0 42881

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OE 4381 (REV 2 67)

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
OFFICE OF EDUCATION
WASHINGTON D.C. 20202

BUDGET BUREAU NO. 51-R600
APPROVAL EXPIRES 6/30/68

ESEA TITLE III STATISTICAL DATA

Elementary and Secondary Education Act of 1965 (P.L. 89-10)

THIS SPACE FOR U.S.O.E. USE ONLY →	PROJECT NUMBER	VENDOR CODE	COUNTY CODE	REGION CODE	STATE ALLOTMENT

SECTION A - PROJECT INFORMATION

1. REASON FOR SUBMISSION OF THIS FORM *(Check one)*

A ☐ INITIAL APPLICATION FOR TITLE III GRANT
B ☐ RESUBMISSION
C ☐ APPLICATION FOR CONTINUATION GRANT
D ☒ END OF BUDGET PERIOD REPORT

2. IN ALL CASES EXCEPT INITIAL APPLICATION. GIVE OE ASSIGNED PROJECT NUMBER

68-06150-0

3. MAJOR DESCRIPTION OF PROJECT: *(Check one only)*

A ☐ INNOVATIVE
B ☐ EXEMPLARY
C ☐ ADAPTIVE

4. TYPE(S) OF ACTIVITY *(Check one or more)*

A ☐ PLANNING OF PROGRAM
B ☐ PLANNING OF CONSTRUCTION
C ☐ CONDUCTING PILOT ACTIVITIES
D ☐ OPERATION OF PROGRAM
E ☐ CONSTRUCTING
F ☐ REMODELING

5. PROJECT TITLE *(5 Words or Less)*

6. BRIEFLY SUMMARIZE THE PURPOSE OF THE PROPOSED PROJECT AND GIVE THE ITEM NUMBER OF THE AREA OF MAJOR EMPHASIS AS LISTED IN SEC. 303, P.L. 89-10. *(See instructions)*

ITEM NUMBER ____________

7. NAME OF APPLICANT *(Local Education Agency)*

Board of Education of the
City of St. Louis

8. ADDRESS *(Number, Street, City, State, Zip Code)*

911 Locust Street
St. Louis, Missouri - 63101

9. NAME OF COUNTY

City of St. Louis

10. CONGRESSIONAL DISTRICT

1, 2, 3

11. NAME OF PROJECT DIRECTOR

Raymond J. Sacks

12. ADDRESS *(Number, Street, City, State, Zip Code)*

5101 Northrup
St. Louis, Missouri - 63110

PHONE NUMBER 776-2215
AREA CODE 314

13. NAME OF PERSON AUTHORIZED TO RECEIVE GRANT *(Please type)*

Dr. William Kottmeyer

14. ADDRESS *(Number, Street, City, State, Zip Code)*

911 Locust Street
St. Louis, Missouri - 63101

PHONE NUMBER 231-3720
AREA CODE 314

15. POSITION OR TITLE

Superintendent of Schools

SIGNATURE OF PERSON AUTHORIZED TO RECEIVE GRANT

Wm Kottmeyer

DATE SUBMITTED

10-15-69

SECTION A – Continued

16. LIST THE NUMBER OF EACH CONGRESSIONAL DISTRICT SERVED 1, 2, and 3	17A. TOTAL NUMBER OF COUNTIES SERVED 1 B. TOTAL NUMBER OF LEA'S SERVED 1 C. TOTAL ESTIMATED POPULATION IN GEOGRAPHIC AREA SERVED 698,000	18. LATEST AVERAGE PER PUPIL ADA EXPENDITURE OF LOCAL EDUCATION AGENCIES SERVED $ 662.67

SECTION B – TITLE III BUDGET SUMMARY FOR PROJECT (Include amount from item 2c below)

1.		PREVIOUS OE GRANT NUMBER	BEGINNING DATE *(Month, Year)*	ENDING DATE *(Month, Year)*	FUNDS REQUESTED
A.	Initial Application or Resubmission				$
B.	Application for First Continuation Grant				$
C.	Application for Second Continuation Grant				$
D.	Total Title III Funds				$
E.	End of Budget Period Report	(05G) OEG-6-8-006150-0019	July, 1968	July, 1969	

2. *Complete the following items only if this project includes construction, acquisition, remodeling, or leasing of facilities for which Title III funds are requested. Leave blank if not appropriate.*

A *Type of function (Check applicable boxes)*

1 ☐ REMODELING OF FACILITIES 2 ☐ LEASING OF FACILITIES 3 ☐ ACQUISITION OF FACILITIES

4 ☐ CONSTRUCTION OF FACILITIES 5 ☐ ACQUISITION OF BUILT-IN EQUIPMENT

B 1. TOTAL SQUARE FEET IN THE PROPOSED FACILITY ______

2. TOTAL SQUARE FEET IN THE FACILITY TO BE USED FOR TITLE III PROGRAMS ______

C AMOUNT OF TITLE III FUNDS REQUESTED FOR FACILITY $______

SECTION C – SCHOOL ENROLLMENT, PROJECT PARTICIPATION DATA AND STAFF MEMBERS ENGAGED

1.			PRE-KINDERGARTEN	KINDERGARTEN	GRADES 1 - 6	GRADES 7 - 12	ADULT	OTHER	TOTALS	STAFF MEMBERS ENGAGE IN IN-SERVICE TRAINING FO PROJECT
A	School Enrollment in Geographic Area Served	(1) Public		10,530	60,022	36,186		4,398	111,136	
		(2) Non-public		1,444	18,201	16,298		574	36,517	
B	Persons Served by Project	(1) Public				9,248			9,248	
		(2) Non-public				797			797	
		(3) Not Enrolled								
C	Additional Persons Needing Service	(1) Public								
		(2) Non-public								
		(3) Not Enrolled								

2.	TOTAL NUMBER OF PARTICIPANTS BY RACE *(Applicable to figures given in item 1B above)*	WHITE	NEGRO	AMERICAN INDIAN	OTHER NON-WHITE	TOTAL
		3,837	6,185	1	22	10,045

SECTION C - continued

3. RURAL/URBAN DISTRIBUTION OF PARTICIPANTS SERVED OR TO BE SERVED BY PROJECT

PARTICIPANTS	RURAL		METROPOLITAN AREA		
	FARM	NON-FARM	CENTRAL-CITY	NON-CENTRAL CITY	OTHER URBAN
PERCENT OF TOTAL NUMBER SERVED					

SECTION D - PERSONNEL FOR ADMINISTRATION AND IMPLEMENTATION OF PROJECT

1. PERSONNEL PAID BY TITLE III FUNDS

TYPE OF PAID PERSONNEL	REGULAR STAFF ASSIGNED TO PROJECT			NEW STAFF HIRED FOR PROJECT		
	FULL-TIME 1	PART-TIME 2	FULL-TIME EQUIVALENT 3	FULL-TIME 4	PART-TIME 5	FULL-TIME EQUIVALENT 6
A. ADMINISTRATION/ SUPERVISION	1		1.0			
B. TEACHER:						
(1) PRE-KINDERGARTEN						
(2) KINDERGARTEN						
(3) GRADES 1-6						
(4) GRADES 7-12						
(5) OTHER						
C. PUPIL PERSONNEL SERVICES						
D. OTHER PROFESSIONAL Vocational Coordinator	4		4.0			
E. ALL NON-PROFSSIONAL Clerk, Electrician and Machinist	1		1.0		3	2.0
F. FOR ALL CONSULTANTS PAID BY TITLE III FUNDS →	(1.) TOTAL NUMBER RETAINED 1			(2.) TOTAL CALENDAR DAYS RETAINED 35+		

2 PERSONNEL NOT PAID BY TITLE III FUNDS

TYPE OF UNPAID PERSONNEL	REGULAR STAFF ASSIGNED TO PROJECT			NEW STAFF HIRED FOR PROJECT		
	FULL-TIME 1	PART-TIME 2	FULL-TIME EQUIVALENT 3	FULL-TIME 4	PART-TIME 5	FULL-TIME EQUIVALENT 6
A. ADMINISTRATION/ SUPERVISION		3	1.0			
B. TEACHER:						
(1) PRE-KINDERGARTEN						
(2) KINDERGARTEN						
(3) GRADES 1 TO 6						
(4) GRADES 7-12						
(5) OTHER						
C. PUPIL PERSONNEL SERVICES						
D. OTHER PROFESSIONAL						
E. ALL NON-PROFESSIONAL						
F. FOR ALL CONSULTANTS NOT PAID BY TITLE III FUNDS →	(1.) TOTAL NUMBER RETAINED ______			(2.) TOTAL CALENDAR DAYS RETAINED ______		

SECTION E - NUMBER OF PERSONS SERVED OR TO BE SERVED AND ESTIMATED COST DISTRIBUTION

		MAJOR PROGRAM OR SERVICES	TOTAL NUMBER SERVED OR TO BE SERVED						NONPUBLIC SCHOOL PUPILS INCLUDED (7)	ESTIMATE COST (8)
			PRE-K (1)	K (2)	1-6 (3)	7-12 (4)	ADULT (5)	OTHER (6)		
1.		EVALUATIVE PROGRAMS								
	A	Deficiency Survey (Area Needs)								
	B	Curriculum Requirements Study (Including Planning for Future Need)								
	C	Resource Availability and Utilization Studies								
2		INSTRUCTION AND/OR ENRICHMENT								
	A	Arts (Music, Theater, Graphics, Etc.)								
	B	Foreign Languages								
	C	Language Arts (English Improvement)								
	D	Remedial Reading								
	E	Mathematics				1,055				0*
	F	Science								
	G	Social Studies/Humanities								
	H	Physical Fitness/Recreation								
	I	Vocational/Industrial Arts				2,700				177,006.90
	J	Special-Physically Handicapped								
	K	Special-Mentally Retarded								
	L	Special-Disturbed (Incl Delinquent)								
	M	Special-Dropout								
	N	Special-Minority Groups								
3.		INSTRUCTION ADDENDA								
	A	Educational TV/Radio								
	B	Audio-Visual Aids				6,000			871	43,783.00
	C	Demonstration/Learning Centers								
	D	Library Facilities				2,700				9,061.00
	E	Material and/or Service Centers								
	F	Data Processing								
4.		PERSONAL SERVICES								
	A	Medical/Dental								
	B	Social/Psychological								
5.		OTHER								

*Costs for mathematics instruction were paid totally out of local funds.

PART II: NARRATIVE REPORT

INTRODUCTION

In January, 1967, the St. Louis Board of Education requested Title III funds for a planning grant to develop a new vocational program with a revised curriculum and expanded facilities. At that time, there was a crucial need to develop greater unification of the liberal arts and vocational education curricula and to integrate students of all abilities and racial backgrounds into the vocational program. The vocational and technical program consisted of one center and a branch which students attended for a full day taking both vocational and academic subjects at these locations. With this arrangement the interest in vocational education had declined in recent years. Students were reluctant to leave their neighborhood high schools and attend the centrally located O'Fallon Technical High School. Furthermore, the percentage of Negro students at O'Fallon was rapidly increasing and white pupils were becoming increasingly reluctant to attend O'Fallon.

When the school system received a planning grant, a full time professional staff of four began to coordinate the development of a new program. The model for the new program included four major features designed to attack the needs mentioned earlier. First, students enrolling in a vocational program would attend their neighborhood or district high school for a half day and the technical center for the other half day. Second, a racial balance would be maintained among freshmen entering the technical program. Third, the vocational program would admit students of all ability levels. And fourth, the technical and vocational curriculum and facilities would be expanded to provide a wider diversification of courses to meet the needs of students and to provide skilled employees for expanding industrial and business demands.

In developing the new vocational program the professional staff involved administrators, teachers, and business, industrial and civic representatives. The curriculum was revised to include new subject areas and new content in existing subjects. The staff initiated contracts for equipment and remodeling required for expansion of curriculum and facilities. A critical aspect of the planning involved a pilot project of 157 students from four high schools who attended O'Fallon for a half day and their district high school for the other half day. This pilot phase was closely observed, and data was collected from both teachers and pupils in order to identify weaknesses and strengths of the arrangement and schedule.

Dissemination of information concerning the opportunities of the new vocational program was a major aspect of the efforts of the planning staff. Various media were employed to convey information to teachers, parents and students entering high school in September 1968.

An application for an operational Title III grant was submitted in January 1968. The U. S. Office of Education awarded a three-year grant beginning July 1, 1968. These Title III funds along with local and state funds are being used to conduct the new vocational program. This report covers the first year's activities for the period July 1, 1968 to July 25, 1969.

EVALUATION OF THE MAJOR OBJECTIVES OF THE OPERATIONAL GRANT

The operational grant proposal enumerated several major objectives.[1] This final report summarizes the progress made toward their implementation.

---

[1] Application for an Operational Grant, Title III, Elementary and Secondary Education Act of 1965, A Plan to Increase Vocational Education Opportunities Through the Expansion of Curriculum and Available Facilities. By the Board of Education, City of St. Louis, Missouri, December 1967.

OBJECTIVES

A. To Unify the Liberal Arts and Vocational Education

In every community there is the need to bring closer together and to unify the liberal arts and vocational education. Lack of understanding, communication and involvement has prevented these two educational components from reaching their full potential of service to the community.

To implement this objective, the vocational program has become a part of the curriculum of all of the general high schools in the city. The O'Fallon Technical Center is an extension of each of these schools and is the vocational and technical skills laboratory of the high schools. The major means of implementing this objective of unification is the arrangement for busing students for a half day to the O'Fallon Technical Center for vocational courses. The other half day the student spends in his home high school from which he ultimately receives his high school diploma.

This arrangement for vocational education overcomes the reluctance of many students to leave the neighborhood high school. It recognizes the strong traditional pull these schools have on the residents and parents in their district. By attending the Center for a half day, students are able to maintain friendships in their district high school and, at the same time, have the opportunity to make new friends in a new setting. The integrated enrollment at the Center enables students to become familiar with the ethnic concerns of both the Negro and white population.

This schedule permits two major incentives for the student. First, he can attend his district high school and participate in its academic and extracurricular activities. Second, the O'Fallon Technical Center can concentrate on providing significant vocational and technical education to each student for the half day he is in attendance.

A student questionnaire[2] designed to elicit information vital to the success of the project was administered to 1445 students who were available during the next to last week of school in June 1969. Among the significant aspects of paramount importance to an effective co-op program is the transportation of students. The items which dealt with bus transportation yielded the following information.

	Yes	%	No	%	No Answer
Has riding the bus to and from O'Fallon kept you from having enough time for lunch?	238	16	1203	84	4
Has riding the bus to and from O'Fallon kept you from getting to your classes on time?	200	14	1240	86	5

The transportation of students to and from the O'Fallon Center has been satisfactory for most all of the students in the first year of the full program as indicated by the high percentages of favorable answers. Approximately 86% reported that riding the bus did not create any problems in having enough time for lunch or getting to classes on time.

A digest of the written comments by students indicated that getting to the buses on time was occasionally a problem. The students attributed the missing of buses to teachers holding the students too long in class or to buses leaving early. The administrators of the O'Fallon Center are aware of the need for diligence and close observation of the busing operation and maintain close liaison with administrators of the ten high schools being served by O'Fallon.

---

[2] Appendix I

A major step in the direction of unifying the liberal arts and vocational education has been achieved through the dual school curricular program that enables the student to keep his roots in his local high school and at the same time get his vocational education at a well equipped technical center. This objective of curriculum unification contains several components.

1. To Provide a Diversified Vocational Education for Students of All Ability Levels. Eight out of ten students who attend high school today will enter the world of work or become homemakers, with only the vocational preparation available at the high school level. For these pupils a "general" education is not sufficient fare. Instead there must be a wide range of training which will challenge all ability levels. Bright students not oriented to college must have opportunities in highly skilled areas such as data processing, drafting, and electronics. Those of lesser academic ability must have some special training involving skills commensurate with their talent in various vocational areas. Approximately 12% of the ninth grade students who entered the VEO program were in the lower academic ability level of the school system. These students are receiving training in all vocational and trade areas except those which require special competency in mathematics.

The list of the departments at the O'Fallon Technical Center and the O'Fallon Branch includes:

Accounting
Aeromechanics
Auto Body Repair
Automechanics
Cabinet and Millwork
Carpentry
Child Care and Development
Clerical
Commercial Art
Commercial Cooking
Cosmetology
Data Processing
Architectural Drafting
Machine Drafting
Dry Cleaning
Electricity and Electronics
Industrial Sewing
Machine Shop
Plumbing
Letterpress Printing
Offset Printing
Radio-TV
Secretarial
Sheet Metal
Shoe Repair
Welding

The systematic analysis and review of curricula, instruction, facilities and equipment carried out during the planning year through the advisory committees undergirds the total operational program initiated at the O'Fallon Technical Center in the 1968-69 year. Revision of vocational curricula included two major aspects. One involved a major revision of the course of study for ninth grade pupils. The second consisted of changes in content in most of the department course offerings. The new program for ninth grade students permits them to enter into training for a major vocation when they enter the high school. Previously, such pupils took a basic introductory vocational program in the ninth grade and did not begin specialization work until the tenth grade.

The total new curriculum for grades nine through twelve contains various modifications and additions in content. These changes were the result of studies of employment needs in the metropolitan area and of consultation with advisory committees. The revised offerings will prepare students to enter employment in areas where there is an increasing demand for skilled employees and to be familiar with the latest equipment and procedures in business and industry.

The extent of diversification of the vocational-technical program at the O'Fallon and the O'Fallon Branch is indicated by the enrollment by departments for the school year 1968-69.

Enrollment by Departments - 1968-69

Accounting	122
Aeromechanics	146
*Auto Body Repair-Automechanics	191
Auto Body Repair Automechanics	233
Cabinet-Millwork	43
Carpentry	71
Clerical	362
Commercial Art	116
*Commercial Cooking	99
*Cosmetology	20
Cosmetology	19
Data Processing	221
Drafting, Architectural & Machine	160
*Dry Cleaning	40
Electricity & Electronics	194
*Industrial Sewing	132
Machine Shop	176
Plumbing	43
Printing, Letterpress & Offset	133
Radio-TV	84
Secretarial	212
Sheet Metal	45
*Shoe Repair	43
Welding	107

*These departments are housed at the O'Fallon Technical Center Branch.

It is worth noting that the installation of an NCR Century 100 Computer has been completed and will be in operation during the school year 1969-70, greatly augmenting the offerings in the data processing field. A program of Child Care and Development was inaugurated for the 1969-70 school year with fifty tenth grade girls representing ten district high schools.

2. To Provide Student Assistance in Job Placement. This objective flows logically from the previous one. Possession of marketable skills does not automatically insure placement. Knowledge in regard to locating employers with specific employee needs is also necessary. Such knowledge is frequently quite critical for the student with lower level skills. In addition to this general awareness of supply and demand, there is the reluctance of many inner city youth to seek employment in areas very far removed from their home environment.

Because of the varied problems facing students as they enter employment, the VEO project assists pupils in job placement. This includes both cooperative work assignments and placement at graduation. In this role the vocational program will place students in areas of their competency and will secure employment for many pupils who frequently have difficulty securing any type of employment.

For many years administrators, department chairmen and teachers of vocational education have maintained close liaison with employers in the St. Louis Metropolitan Area. The high placement ratio of trained O'Fallon students reflects this ongoing cooperative relationship between school and business, industry and government. This relationship is being maintained and strengthened by the work of four full-time coordinators. These coordinators were added to the Technical Center staff through the Title III grant. Their duties include:

1. Establish and maintain contact with civic, business, industry and labor groups.
2. Secure information on employment needs.
3. Locate job openings for pupil placement.
4. Assist department chairmen at the center with placing seniors in work experience training programs.
5. Work with department chairmen on pupil placement in jobs upon graduation.
6. Make periodic job visitation to follow up on pupil progress in the work experience training program.
7. Follow up on pupil progress on the job after graduation.

The focus for job placement activities is the coordinators' office, which serves employer requests of all types, handles student applications for employment and keeps employment records of graduates. This placement center provides a place where students can complete applications for employment, meet with prospective employers and obtain occupational information. Table 1 presents a summary of the coordinators' activities during the 1968-69 year. These figures are compiled from weekly reports filed by the four coordinators and represent the average distribution of coordinator time.

Table 1
Mean Percentages of Coordinators' Time Allocation

	1st Term	2nd Term	Total
Individual student interviews	20.50%	12.25%	16.50%
Group activities	9.75	4.75	7.25
Contacts with other schools	2.75	9.25	6.00
O'Fallon staff contacts	26.25	18.25	22.25
Community contacts, placement and liaison	21.25	33.75	26.25
Other activities	19.50	21.75	21.75
	100.00%	100.00%	100.00%

By the end of the school year 90% of the 1969 O'Fallon graduates had been placed in jobs. The coordinators, in conference with the Director, have concluded that the 90% placement figure is good, but needs to be improved. Their aim will be to substantially reduce below 10% the percentage of graduates not employed by the end of the school year 1969-70. Many of the 10% not placed this year by the close of school were students who were not highly recommended by their shop instructors. While it is recognized that this is a handicap, the placement of these graduates in positions commensurate with their skills and abilities is in some respects more important than placing those who are highly recommended by shop teachers.

More effort will be put forth during the next school year to reduce the unplaced percentage of graduates by the end of the year.

3. To Provide Advanced Courses in Physics, Chemistry, Biology, Mathematics, and Foreign Languages. Efforts to provide advanced courses in these areas at the O Fallon Technical Center have not recruited enough students for any course to justify its being offered. There are several reasons that can be advanced for this lack of success, none of which are likely to change in the near future. With this in mind, and in view of the current plans of the St. Louis Public School authorities to permit advanced students to enroll in selected courses at the Harris Teachers College, it seems appropriate that efforts to implement this objective be dropped.

4. To Provide a Guidance Program for Seventh and Eighth Grade Students. Successful implementation of the project requires that students and parents are fully informed of available vocational education opportunities. Such occupational information focuses on the number and type of employment opportunities available to individuals with training in specific vocational areas. Technical Center, district high school, and elementary school personnel participate in the guidance activities. They conduct both group orientation sessions and individual conferences. During the period April 14th through April 25th, 1969, a visiting team, consisting of an O'Fallon representative and a district high school counselor, visited each of the 105 elementary schools that had an eighth grade, to discuss the O'Fallon program.

The procedure for each team which visited an elementary school was as follows:

a. The O'Fallon representative distributed the brochures, AN $11,000,000 ADDITION[3] and IT'S UP TO YOU[4] and re-emphasized the importance of skill training in introducing the film.

b. The O'Fallon representative introduced and showed the film, IT'S UP TO YOU.

c. Both representatives answered student questions and distributed brochures, OPPORTUNITIES UNLIMITED[5], in accordance with student interest.

d. The O'Fallon representative explained the application procedure, the making of department choices, parent signatures, etc.

e. The district high school representative discussed how the O'Fallon program and the district high school program work together.

Hopefully this method of providing guidance to eighth graders and information to their parents will reduce the number of ninth grade students who indicate they need additional vocational guidance during the school year 1969-70. In the questionnaire administered at the end of the school year 1968-69 student responses indicated a significant need for more guidance assistance as indicated by the following items.

	Yes	%	No	%	No Answer
Have you received enough assistance from your counselor at your home high school about the Co-op program?	900	63	532	37	13
Do you want additional help in vocational planning?	798	56	623	44	24

These responses emphasize the need for sound and timely vocational development information and career guidance at the late elementary and secondary levels.

It is expected that the spring 1969 visitations to elementary schools to furnish complete information about the VEO project through the film

---

[3] Appendix II
[4] Appendix III
[5] Appendix IV

"IT'S UP TO YOU," the accompanying brochures, and questions and answers will constitute vital guidance information to seventh and eighth grade students.

5. To Correlate the Vocational Curriculum with the Post-Secondary Vocational Education Courses Being Planned by the Junior College. The metropolitan St. Louis area has a junior college program which includes post-secondary vocational education courses. Project personnel are in contact with the junior college staff concerning vocational offerings and plan student programs to make use of these post-secondary opportunities. Capable students are encouraged to take such advanced training after graduation from the Technical Center.

A liaison committee has been established which includes members from the St. Louis City and County Vocational schools and the Junior College District staff. Its function is to correlate the vocational-technical offerings of the secondary level institutions with the more advanced technical offerings of the junior colleges so that there is orderly progression through correlated curricula. The liaison committee meets periodically during the year to contemplate needed changes and make recommendations.

6. To Provide a Heterogeneous Educational Environment in Terms of Culture, Race and Ability. There is value in having students of various abilities and ethnic backgrounds interact in a common educational environment. To establish a heterogeneous population in terms of ability, race and culture, students are bussed from all areas of the city; programs for all ability levels are offered; and racial balance is commensurate with the city-wide high school racial composition. Racial balance was achieved by establishing quotas for each high school district

and closely adhering to them. Results to date are most encouraging. Racial balance was established for the ninth grade in September and has been very stable through the year. The number and percentage of students leaving the vocational program during the year has been quite low.

That this objective has been implemented is clearly demonstrated in Table 2 which shows the enrollments by race and year from 1963 to 1968. The ninth grade enrollment figures for 1968 of 49.4% Negro and 50.6% white show a dramatic reversal of the segregation process which had progressively increased. The tenth, eleventh, twelfth grade figures of 70.5% Negro and 29.5% white reflect the trend which had been developing since 1963.

Table 2
O'Fallon Technical Center
Enrollment and Racial Distribution

Date	Enrollment	White		Negro		Other	
		No.	%	No.	%	No.	%
Oct. 1963	3001	1622	54.0	1362	45.4	17	00.6
Oct. 1964	2735	1217	44.5	1506	55.0	12	00.5
Oct. 1965	2548	928	36.4	1613	63.3	7	00.3
Oct. 1966	2318	629	27.1	1681	72.5	8	00.4
Oct. 1967	2107	497	23.6	1607	76.3	3	00.1
Oct. 1968							
9th grade	1023	519	50.6	504	49.4	-	-
10,11,12	1465	432	29.5	1033	70.5	-	-

By 1971 with the continued registration of racially balanced ninth grade classes the entire school should have a racially balanced student population.

7. To Expand Facilities and Offerings at the O'Fallon Technical Center.

To meet the needs of the community and to carry out the objectives of the program it was necessary to expand course offerings and facilities at the O'Fallon Technical Center and the O'Fallon Branch. The development of additional courses, installation of equipment and expansion of space are major phases of the project. Twenty-six separate programs eventually will be in operation and the total enrollment of the center will be increased to approximately 4,000 students at full capacity. Special curriculum committees revised the ninth grade shop and business education courses of study. These revisions were introduced in September 1968 at the ninth grade level. Curriculum committees have completed the necessary revision of tenth grade offerings for introduction in September 1969. Reorganization of the eleventh and twelfth grade offerings will follow in succeeding years. In order to carry out the improvements and additions that were recommended it was necessary to secure additional equipment and to replace that which was out of date.

A limited vocational program, including curriculum areas not available at the Center, is operated at the O'Fallon Branch which is located at Vashon High School. This arrangement follows the same dual school principle, since students are enrolled in a district high school for their academic work and in the O'Fallon Branch for vocational training. Traditionally, most of the students attending the Branch have lived in the Vashon High School district. For these students transportation from the district high school to their center of vocational training is not necessary. However, free transportation is provided for students who attend the Branch and live outside the Vashon High School district. The Branch has five major vocational shops, three of which are not offered at the O'Fallon Technical Center.

The Automechanics Department, where all studies and surveys indicate a growing need for skilled workers, is an example of how the expansion has affected the program. Additional physical facilities at the O'Fallon Center and the acquisition of the newest in equipment, tools and training aids add to the "new look." Included in the new building addition will be one shop designed for the introduction of a small engine repair program, while a second new area will permit the relocation of the chassis shop to make present space available for expansion of an automatic transmission training program. A revised twelfth grade offering increases training time on automatic transmissions while placing less emphasis on major engine overhaul. Additional hydraulic hoists, brake testing equipment and a chassis dynamometer have increased capabilities in training for car performance diagnosis and changing safety and inspection needs. The Auto Body Repair program will contain double the number of training stations when the new building, with an additional paint booth and the latest in equipment and tools, are completed.

An electrician and a machinist have been added to the staff at the Center to expedite the installation of new equipment and the maintenance of existing equipment. Their on-the-job availability has significantly speeded up the installation and hence effective use of new equipment.

Student reaction to the expanded facilities and offerings available through the VEO program were obtained from the student questionnaire. Student responses to items which pertain to the implementation of this objective contain significant information.

	Yes	%	No	%	No Answer
Are you satisfied with your present department choice?	1202	83	238	17	5
Are you satisfied with your opportunities to use the equipment & materials in your shop?	1297	90	145	10	3
Do you receive enough supplies and/or materials to complete class projects?	1233	86	207	14	5
Are you satisfied with the amount of individual attention and assistance received in your shop?	1230	85	207	15	8

	GOOD		AVERAGE		POOR		
	No.	%	No.	%	No.	%	No Answer
I believe that my progress in learning how to use hand tools and equipment is:	774	54	630	44	25	2	16
I believe that my progress in completing the jobs listed on the shop progress chart is:	553	39	770	54	106	7	16
I believe that my overall progress toward becoming a skilled worker is:	670	47	708	49	61	4	6
I believe that the instruction offered Co-op students is:	960	67	421	29	57	4	7

Examination of this data provides a firm basis for the conclusion that the expanded facilities and offerings of the VEO program are satisfying student needs quite well. The questions pertaining to department choice, use of equipment and materials, availability of supplies, and individualized instruction were answered affirmatively by 86% of the students. This percentage is considered very favorable in view of the varied ethnic backgrounds, and geographical distribution of the student body.

It is anticipated that the experience gained during the first full year of operation, plus the addition and development of new programs, will reduce the percentage of negative responses for the school year 1969-70.

Students when asked to analyze specific progress in the use of hand tools, mastery of jobs on the progress chart, and overall progress again reported highly satisfactory results. Ninety-eight per cent, or 1404 students reporting, affirmed that their progress in using hand tools or equipment was adequate or better. Only 2%, or 25 students, indicated poor progress in this area.

Student progress in completing the jobs listed in the shop progress chart again showed a high average or better response. Ninety-three per cent, or 1323 students, reported average or better progress. A similar response was given to the questionnaire item on overall progress in becoming a skilled worker. Ninety-six per cent, or 1378 students, reported average or better progress.

Student response to the important question on the quality of instruction yielded results that support the instructional efficiency and effectiveness at the O'Fallon Center. Sixty-seven per cent, or 960 of the students reporting, answered that the instruction was good; 29%, or 421 students, rated instruction average; only 57 students, or 4%, considered instruction poor. In general, those student appraisals reflect very favorable attitudes toward vocational-technical instruction. Viewed from the context of the diverse student population and the current national climate of dissent, the finding that 96% of the students reporting indicated that the instruction they received was adequate or better strongly supports the conclusion that the objective of providing expanded facilities and offerings at the O'Fallon Center was well implemented during the first year of operation of the Vocational Education Opportunities program.

A further supporting factor of the quality of the program is the 9% drop-out percentage for students in the VEO program which is substantially superior to the 15% average annual drop-out rate for all secondary schools.

MAJOR ACCOMPLISHMENTS

1. The project has made considerable progress toward achieving the objective of providing a heterogeneous environment in terms of culture, race and ability. The plan for permitting each district high school to send a prorated number of ninth grade students to the O'Fallon Technical Center has been implemented. This arrangement has achieved an approximate 50/50 ratio between black and white ninth grade students as compared to the 1967 ratio for all grades of three black to one white student. Racial balance does not exist in the tenth, eleventh and twelfth grades, since all students enrolled at O'Fallon in 1967-68 received the option of returning to O'Fallon in the half-day program. With the plan of introducing racial balance in each ninth grade class, the Technical Center will have racial balance in all grades by 1971-72.

2. The project has achieved the aim of bringing racial balance into the O'Fallon Center. A critical aspect related to racial balance concerns student relations. The student questionnaire elicited information on two questions bearing on student relations.

	Yes	%	No	%	No Answer
Have you been able to make friends with students from other schools while attending O'Fallon?	1337	93	107	7	1
Have you been able to keep your friends at your home school while attending O'Fallon?	1267	88	168	12	10

It is apparent from these data that busing varied student populations from different geographical areas of the city has not been deleterious to developing friends in the new school situation or retaining friends in the home school. Ninty-three per cent, or 1337 students, reported they had been able to make friends with students from other schools while attending O'Fallon. This must be recognized as a major accomplishment and is a tribute to the effective planning and carrying out of the VEO program by its administration and instructional staff.

3. The teaching staff of the technical schools has been intimately involved in planning the new program through close relationship with their department advisory committees in developing and revising curricula, and planning equipment and physical plant alterations. Teachers have had opportunities to express observations and opinions of the program by completing questionnaires. The analysis of a questionnaire administered to teachers at the end of the pilot year provided useful information pertaining to their experience teaching co-op students during that year.[6] A second questionnaire sought information related to problems and possible solutions during the first year of operation.[7]

Feedback of the results of these questionnaires was provided to the teachers. Involving the faculty in planning and participating in the development of the new O'Fallon Technical Center represents a deliberate effort to enlist the support and assistance of an informed staff. Without this support the project would unquestionably fail or be substandard. With a supportive and understanding teaching staff probability of success of the project is much enhanced.

4. From its inception the Vocational Education Opportunities project has drawn largely on the wisdom and experience of community leaders from business, industry, government, labor and education. In 1966 a City-Wide Advisory Committee[8] was formed to serve in a consultant capacity. The project staff has continuously appraised the committee of program

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6 Appendix V
7 Appendix VI
8 Appendix VII

development and sought its advice in regard to the general focus and specific procedures of the project.

5. Each of the twenty-six departments at the Technical Center developed department advisory committees[9] during the year of the planning grant. These committees which were made up of representatives from business, industry, labor and education, served in an advisory capacity in the revision and planning of curricula and the design of physical plant alterations and equipment purchases. The interest of the advisory groups in the development of potential employees trained on adequate equipment is obvious.

6. Projects in education are often not well received because the student participants are not given the opportunity to systematically express attitudes and opinions about the programs in which they are enrolled. To prevent this, a questionnaire was designed to elicit useful information from students enrolled during the school year 1968-69. The results demonstrated a substantial approval of the program with some good suggestions for improvement. The results of the student questionnaire which was administered in June 1969 have been articulated into this report at strategic points where the analysis of the responses provided meaningful support to the objective being considered.

7. An additional significant facet of the new program has been the geographical extension of recruitment. Students have been recruited from sections of St. Louis which formerly sent only a few students for vocational education, and there has been an increase in the number of requests from other areas. The total number of requests from ninth grade students for enrollment in September 1968 exceeded the number for whom facilities

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[9] Appendix VIII

were available. This large enrollment drawn from all areas of the city indicates a trend toward the development of a more heterogeneous environment in terms of culture, race, and ability.

MAJOR GOALS ONLY PARTIALLY ACCOMPLISHED

1. Implementation of career guidance programs for seventh and eighth grade students and continuing career guidance for O'Fallon students has been only partially accomplished. The chief procedures for implementing this goal for seventh and eighth grades have consisted of dissemination of information concerning the new vocational program. Staff from the O'Fallon Technical Center have visited elementary schools and described the vocational opportunities to eighth grade students and their parents. These presentations by the O'Fallon staff have included the showing of a color movie describing the O'Fallon Center and its opportunities and the distribution of brochures containing information about the O'Fallon program and related occupational data. These materials will be more fully described under the dissemination report.

While these efforts by the O'Fallon staff have provided some guidance for elementary pupils in choosing a vocational program, the major counseling and guidance concerning the choice of high school programs must come from elementary school principals and teachers. In many cases the latter type of guidance has not been adequate due to two factors. One is the lack of in-depth information concerning the vocational program. A second is the lingering doubt among many elementary teachers and principals of the value of vocational education.

Fifty-six per cent, or 798 of the O'Fallon students responding to the student questionnaire, indicated that they wanted additional help in vocational planning; 44%, or 623 students, indicated that they did not. This data highlights the need for continuous career guidance for elementary and secondary students.

One potential means of overcoming these limitations in the career guidance of elementary and secondary students is an institute or workshop on vocational education and planning for principals, teachers, and counselors. The project staff is presently reviewing the feasibility of such a program to be held in 1969-70. Such an institute or workshop would probably be held at the O'Fallon Center in after-school hours and would carry graduate college credit.

2. One objective of the project called for the offering of advanced academic subjects in physics, chemistry, biology, mathematics and foreign languages at the O'Fallon Technical Center. Efforts to provide these courses failed due to insufficient enrollment. The major difficulty in recruiting sufficient enrollment for such courses is the reluctance of advanced students to leave their district high school for a half-day and go to the Technical Center. Students who could qualify for these advanced academic programs are juniors or seniors. By this time they have a very close tie with the district high school and are reluctant to go to any other institution on a daily basis. This problem is not encountered with students in the vocational courses since they are entering the half-day program at the ninth grade and have not developed strong ties with a district high school. As pointed out earlier, activities designed to implement this objective have been canceled.

3. A major objective of the VEO project which has only been partially fulfilled is that of successful participation in extracurricular activities at the home high school. The answers to the student questionnaire reflect the fact that attendance at O'Fallon has interfered to some extent with participation in home school activities.

	Yes	%	No	%	No Answer
Has attendance at O'Fallon interfered with participation in extracurricular activities at your home school?	700	49	742	51	3

It is apparent that many students, almost half, report interference with home school activities. The major complaint seems to concern missing auditorium sessions, dances, plays, elections, etc., which are given during the half-day they attend the O'Fallon Center and are not repeated during the half-day they attend their home school. It may be an inevitable fact that the students will miss some scheduled activities due to attending O'Fallon for one-half day. Efforts should be directed toward keeping these to a minimum.

INSTITUTIONAL AND COMMUNITY IMPACT

1. Impact on the School System. The project has created a new interest in vocational education in the school system. Despite some of the limitations mentioned previously, there is a totally new approach to vocational education. Numerous representatives from business, industry, government, and labor are being involved in planning vocational curriculum. Dissemination of the vocational opportunities is more extensive and effective than it has been in the past. The new schedule of vocational activities permits students to attend both their district high school and the Technical Center. The interest in pursuing a vocational program has grown to the extent that the applications for enrollment exceed the number for which facilities are available and the plan for prorating enrollment has demonstrated that a heterogeneous student body can be achieved.

2. Impact on the Community. The involvement of business, industrial, labor, and civic representatives through the City-Wide Advisory Committee

and the Department Advisory Committees has created a new interest in the vocational and technical program of the St. Louis schools. Representatives of business, industry, government, and labor have been most supportive of the project and have viewed it as a genuine effort to improve opportunities for vocational education available to St. Louis youth. Many of these members of the committees as well as others in the community are cooperating by employing students as they complete their training at the Technical Center.

PROJECT FUNDING IN THE FUTURE

The Vocational Education Opportunities project is being operated through local, state and ESEA, Title III funds. The major proportion of operational funds comes from local sources. If the project continues at its present level of success, it will be continued, with the Board of Education assuming the guidance, coordination and evaluation costs presently supported by Title III.

Several school districts have requested information concerning the project. However, we are not aware of any system which has implemented a new program patterned after the VEO plan.

PROJECTED ACTIVITIES FOR 1969-70

The Project started its second year of operation in July 1969. The objectives for this second year are the same as the first year with one minor exception. Advanced academic courses will not be offered at the Center because recruitment did not result in a sufficient enrollment for such classes.

Activities during the second year will be essentially the same as those of the first year. Enrollment of ninth graders from each high school will be prorated. This will establish racial balance in the ninth and tenth grades. The total enrollment of the Technical Center will be increased from 2,400 to 3,100 for 1969-70.

Building changes are scheduled for the Aeromechanics, Automechanics, and Sheet Metal departments to improve sound control, to provide more privacy for instruction in related subjects, to furnish better locker and toilet facilities, and other desirable modifications. Contracts have been awarded for construction of additional shop space in Auto Body Repair, Automechanics and Sheet Metal Fabrication.

The revision and expansion of course offerings will continue. Among the major revisions for 1969-70 will be:

1. The introduction of a three-year program in Child Care and Development designed to train child care aids or assistants in nursery schools, child day-care centers, hospital and therapy centers and kindergarten programs.

2. The acquisition of a third generation computer system with card-disc-tape capabilities to provide on-site training in computer operation and programming.

3. The opening of an additional machine shop laboratory to provide training in the operation of machines employing such new techniques as tape control. Surveys of industry indicate the extensive use of high precision machinery, some of which employ a tape control system.

4. The expansion of facilities will permit a major emphasis in Offset Printing to meet the employment trends in the industry and to provide employees for non-printing businesses who are establishing "in-plant" shops.

5. The utilization of an additional Welding shop will provide students with a well-lighted laboratory designed to incorporate innovations in booth design, ventilation and scrap disposal resulting in economy of working time and improved safety. The newest in multi-purpose welding machines that can be used for manual-shielded arc welding, gas-metal arc welding and gas-tungsten arc welding will be available to advanced students.

One new activity which the staff is considering for the second year is an institute or workshop for elementary principals and eighth grade teachers. Such a program would be conducted at the O'Fallon Technical Center. Focus of the institute would include theoretical and practical aspects of vocational education and career development; employment needs in St. Louis; vocational curriculum for the St. Louis school; and familiarity with the shops and equipment at the Technical Center. The program is planned as a cooperative course with the University of Missouri - St. Louis and will carry graduate credit.

Evaluation of the project will continue with the present model. A data bank has been established which includes pertinent data for each student who enters the project. This data bank will permit evaluation of the project in relation to both students enrolled in 1969-70 and those who graduate in June 1969, as well as enrollees and graduates in succeeding years. Part of the evaluation will consist of a follow-up study of graduates.

The questionnaires administered to the faculty and students were designed to yield results which could be fed back to faculty and administrators of the O'Fallon Technical Center and the participating home high schools so that "bugs" in the operation could be ironed out.

Continued use of questionnaires and other measurement devices designed to yield useful input information will be utilized in the fully operational VEO project during the school year 1969-70.

Another research component is being contemplated for future utilization. This would involve follow-up studies of students who have dropped out of and who have completed the O'Fallon Technical Center program. A proposal for a longer interval study of students who enroll in the VEO program is in the formative stages. Following student progress through the training program into subsequent job performance will provide vital information for feedback and analysis of the ongoing VEO programs over time.

PART III: DISSEMINATION OF PROJECT INFORMATION

From the beginning of the project the staff has attempted to provide continuous and widespread dissemination of information which is descriptive of the new Vocational Education Opportunities program. Dissemination has been directed to two major audiences. One consists of individuals in the City of St. Louis including parents, students, principals, teachers and representatives of business, industry, government, and labor. The other major audience is composed of interested persons and institutions outside of the City of St. Louis. Media for the former consists of the following:

1. The color film entitled "It's Up to You."

This is shown to parents and students as a means of providing information concerning vocational opportunities available at the Technical Center.

2. Several brochures have been prepared to describe the vocational program. One is entitled "An Eleven Million Dollar Addition" and describes the general organization of the new Vocational Education Opportunities

program. A second brochure is entitled "It's Up to You." It contains a brief description of each of the training programs at the Technical Center. This also includes data relevant to the salaries individuals earn in each of the vocational areas. Other brochures, "Opportunities Unlimited," describe in depth the various departments at the Technical Center. There is a separate brochure for each department.

3. Feature newspaper articles have described the new project.

4. Staff from the Technical Center have addressed principals, teachers, school classes, and community groups on the opportunities of the project.

5. Professional staff meetings including administrators, counselors, and teachers of the O'Fallon Technical Center were held during the year of the planning grant and the first year of operation. The goals of these meetings were to develop total staff involvement in planning the project and to precisely determine goals and policy for the project.

Media for dissemination of information to individuals and institutions outside of the City of St. Louis have consisted of the following:

1. The film and brochures described above have been sent to persons requesting them.

2. The staff has honored numerous requests for copies of the proposal and the report of the planning grant.

PART IV: EVALUATION

The administration of the St. Louis School System is firmly committed to meaningful and useful project evaluation. In the VEO project the evaluation model[10] is similar to that used with Title I projects by the St. Louis Public Schools. Designated as an Information Feedback System the plan encompasses four features: input information about students; analysis and planning at the local school level; faculty implementation of plans; and review and feedback. The purpose of this model is to provide administrators and teachers with the data that will enable them to eliminate weaknesses in the project and continuously improve the vocational opportunities.

If improvements in the educational process are to be made, evaluation must be in the form of immediate feedback to the schools and not in the form of annual scholarly reports to higher governmental authorities. The annual report in a highly readable form has its purposes for summary and for the long look backward but all of the uncovered information which could have been of service to the practitioner should have been provided him as soon as it was discovered. If evaluation is to be of most practical benefit feedback of findings should not be delayed until the end of the project.

EVALUATION PLAN

A detailed schematic representation of the plan used to evaluate the VEO program of the O'Fallon Technical Center is presented in the appendixes.[11] The evaluation plan was made operational through a committee designated the Research Committee of the VEO program. Its members include the VEO program director, a supervisor in the Division of Evaluation and

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[10] Appendix IX

[11] Appendix X

Research, an assistant principal of the O'Fallon Technical Center, and the evaluation consultant. This committee initiates various stages and plans for program evaluation. These are presented to and discussed with the Professional Staff Committee,[12] including administrators from the central office, the Director of Vocational, Technical and Adult Education, and the Principal of the O'Fallon Technical Center. Each suggested evaluation proposal for the ongoing program is studied and approved before the operational data is collected. Appropriate instruments for data collection are developed by the Research Committee, and approved by the Staff Committee.

Analysis of the data is initially carried out by the evaluation consultant in cooperation with the Research Committee.

EVALUATION OF THE REGULAR PROGRAM

The regular VEO program started in September 1968. By December the Research Committee proposed to the administration that information be collected from the faculty which would provide knowledge of how they, the faculty, perceived the problems and concerns of their students and what they perceived as the strengths of the program. To collect this information a questionnaire was developed which requested the faculty to report student concerns and problems in the crucial areas of attendance, transportation, housekeeping, lockers, food service, instruction, home school, student behavior and counseling. This information has been compiled and has been circulated to the faculty and discussed with them. A quote from the summary of this report states: "The analysis in Part II reflects the generally positive comments and attitudes of a concerned and interested faculty. The new VEO program is viewed (by the faculty) as one with real potential and one which promises decided improvement in school climate and instructional facilities, student characteristics and teacher opportunity in comparison with the immediate past years. It seems fair to report optimism and forward-looking expectation of success in the months and years ahead."

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[12] Appendix XI

In June 1969 a student questionnaire was administered.[13] It was designed to elicit information from the student body regarding their feelings and ideas about their first year of attendance in the new VEO program. These data have been analyzed and objective feedback will go to administrators and faculty to plan and implement needed changes in operation for the second year, 1969-70, of the VEO operation.

LONGITUDINAL EVALUATION - THE DATA BANK

In viewing the progress of the vocational education opportunities program over time in St. Louis significant data has been collected pertaining to each student and keypunched on IBM cards. The data include biographical information such as student number, sex, race, and ability. Other data will reflect progress through the VEO program, placement data, and information pertaining to retention, transfer or withdrawal. In three years when the first graduates of the new program obtain employment it will be possible to assess progress in many areas such as job satisfaction, socio-economic development, community participation, and the like. The dropouts and transfers can likewise be screened and surveyed. A longitudinal study of students who complete the new VEO programs and move into the world of work can be carried out over suitable intervals such as 1 year, 5 years, or 10 years, by utilizing the bank of data stored at the O'Fallon Technical Center. The need for longitudinal studies of human behavior is well known. The mechanism for the VEO project at the O'Fallon Technical Center to carry forward such a study is being built in at its inception. It requires only administrative foresight and the assignment of modest evaluation funds to reap the rewards of this potential for fruitful longitudinal analysis.

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[13] Appendix I

1968-69 REGISTRATION AND ENROLLMENT STATISTICS

The information key-punched on cards and stored in the data bank yields some interesting registration and current enrollment statistics[14] in the VEO program for the 1968-69 academic year as of March 1, 1969. Figure 1 shows the enrollment statistics as of March 1 broken down by race, sex, ninth grade, and combined tenth, eleventh, and twelfth grades.

Figure 1

Active Enrollment by Race, Sex, and Grade as of March 1, 1969

Grade Level		Male	%	Female	%	Total	%
9	Negro	304	49.0%	171	55.9%	475	51.3%
	White	316	51.0	135	44.1	451	48.7
	Total	620		306		926	
10, 11 and 12	Negro	602	68.6%	357	77.8%	959	71.7%
	White	276	31.4	102	22.2	378	28.3
	Total	878		459		1337	

The statistics in Figure 1 reflect the difference between ninth grade enrollments, which are under the new quota system, and enrollments for the tenth, eleventh and twelfth grades combined, which includes previously enrolled full-time O'Fallon students. In the ninth grade 475, or 51.3% Negroes and 451, or 48.7% whites are actively enrolled. These figures are quite significant when compared with the 959, or 71.7% Negroes and 378, or 28.3% whites enrolled in the combined tenth, eleventh, and twelfth grades.

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[14] Appendix XII

That the objective of the VEO project to bring about a better racial balance is being met is clearly indicated by these statistics.

In Figure 2 statistics are reported which reflect the holding power of the new VEO program.

Figure 2

Students No Longer Attending O'Fallon by Race and Sex as of March 1, 1969

	Male	%	Female	%	Total	%
Negro	60	2.4%	44	1.7%	104	4.1%
White	89	3.6	33	1.3	122	4.9
Total	149	6.0%	77	3.0%	226	9.0%

Sixty, or 2.4% Negro males have left the program since September 1968 as compared with 89, or 3.6% white males. The figures are reversed for females. Forty-four, or 1.7% of the total registration represents the Negro females who left the VEO program as compared to the 33, or 1.4% white females who left. None of the dropout statistics for the categories of students who left the O'Fallon program is indicative of retention problems for the program. Actually, the holding power of the VEO program is superior to that of the regular academic high schools in the City of St. Louis. The holding power of the O'Fallon program is reflected in the 91% retention rate as of March 1, 1969. This compares favorably with the annual retention rate of 85% for all high schools in the city.

Supporting data of interest appear in the analysis of the June 1969 student questionnaire.

	Yes	%	No	%	No Answer
Would you recommend the Co-op program to other students who desire technical training?	1276	89	157	11	12
Are you planning to continue in the Co-op program?	1186	83	238	17	21

These data support an overall conclusion that the Vocational Education Opportunities program is realizing its objectives in a realistic and meaningful way. It should be pointed out that the figure of 238, or 17% of the students indicating they would not continue in the co-op program is spuriously high. This question is not an appropriate one for graduating seniors who obviously will not continue in the O'Fallon program. A check with several seniors indicated that they were uncertain about the answer to this question. The true percentage of students planning to return to the O'Fallon Center is higher than the 83% reported.

The total evaluation plan of faculty involvement, systematic analysis and feedback of significant information, and the implementation of changes suggested through evaluation makes for a climate of growth and planned progress. If the concerted and cooperative efforts of a dedicated administration and faculty can successfully develop vocational education opportunities and reach the objectives of the VEO program it will be in no small part due to the careful and systematic planning, implementation and evaluation which features the VEO program of the O'Fallon Technical Center. The global aim of providing vocational education opportunities for the many students in the City of St. Louis high schools who enter employment has taken a giant stride forward through the innovative, creative VEO plan being carried out at the O'Fallon Technical Center.

APPENDIXES

VOCATIONAL EDUCATION OPPORTUNITIES

O'FALLON TECHNICAL CENTER

APPENDIX I

QUESTIONNAIRE FOR STUDENTS

May 27, 1969

Memo to Teachers:

In connection with our Title III grant for the VEO project, it is necessary for us to submit periodic reports to the U. S. Office of Education and the Missouri Department of Education. Since the students and teachers are two of the most important elements of our program, we periodically ask for their opinions and reactions. As you know, we administered a similar questionnaire to the pilot group last year and the results yielded information which has proven helpful in the plans for improving the Co-op program. In December of this school year we asked for your impressions. It is our hope that by obtaining the feelings and opinions of practically all of the students on the survey that an even more complete picture can be obtained.

We are asking your cooperation in administering the questionnaire. You can realize that it would be very time consuming to gather all of the students in one central location for this purpose and it was felt that with your cooperation the questionnaire could best be administered through the individual advisory room. The information obtained will be the nucleus of our final evaluation report for Title III officials. None of this information will be used to evaluate teachers. It is important that the students be permitted to answer the questions as they truly feel. Please let them make their own decisions about answering the questions.

An instruction sheet together with a copy of the questionnaire is attached for your examination. The questionnaire is to be administered Tuesday, May 27, during the first period, (8:45 - 9:15) and the fourth period, (12:10 - 12:40). You will pick up your supply of questionnaires in the office Tuesday morning and you will be alerted about the survey period by announcements over the P. A.

Thank you for your wonderful cooperation.

Research Committee:

Charles J. Collins
W. Forrest Layne
David J. Mahan
King M. Wientge

hfb

May, 1969

Teachers:

Please read aloud the following "Instructions" exactly as written:

Instructions for Administering Student Questionnaire

Today we are going to complete a questionnaire that has been prepared by those who are making a study of the Co-op program. This is not a test. We want to find out exactly how you feel about the program at the O'Fallon Technical Center. We are asking you not to discuss any question with any other student for we want each answer to reflect your own opinion and feelings.

You will have 30 minutes to complete this questionnaire. Answer each question thoughtfully.

Let's look at the general information on page one. Read the paragraph to yourself while I read it aloud. (Read aloud)

Now turn to page 2.

Now print your name on the line provided, last name, first name and middle initial. If you have no middle initial, leave the space blank.

Then print your home address; number, street and zip code.

Now fill in the other information asked for:

Sex
Age in years
Year in high school
Your district high school
Your department
When you attend O'Fallon (a.m. or p.m.)

Now, when I tell you to begin, answer all of the questions at the bottom of this page, those on page 3 and those on page 4.

You will notice at the bottom of page 4 there is a place for you to make any additional comments. If you wish to make any comments about the O'Fallon program, feel free to do so. Anything you say will be kept strictly confidential.

Are there any questions? You will have 30 minutes to work. You may begin.

Teachers:

At the end of 30 minutes please collect all questionnaires, place them in the envelope provided and send them to Mr. Layne in Room 411C.

O'FALLON TECHNICAL CENTER
Saint Louis, Missouri

May 27, 1969

QUESTIONNAIRE FOR STUDENTS

Each of you is enrolled in the cooperative program in which students take a half day program at their home high school and a half day program at the O'Fallon Technical Center. Next fall the program will again be expanded to include many more students from all high schools. The shop facilities will be increased, new equipment will be added and in general the program of technical training will be expanded and improved. Since you are the first students to participate in this reorganized program we need your carefully considered answers to the following questions. This will help us to do a better job for you and for the many more students who will attend O'Fallon Technical Center next fall. Your help will be much appreciated.

Henry C. Briesemeister, Principal
O'Fallon Technical Center

Raymond J. Sacks, Director
Vocational, Technical & Adult Education

Name____
Last   First   Middle Initial

Home Address______________________________________
Number   Street   Zip Code

Place an X in the appropriate space for the following:

Sex: Girl____   Boy____   Age in years: ______

Grade in High School: 9th____   10th____   11th____   12th____

Your District High School:

____	Beaumont	0100	____	Roosevelt	0350
____	Central	0150	____	Soldan	0400
____	Cleveland	0200	____	Southwest	0450
____	McKinley	0250	____	Sumner	0500
____	Northwest	0300	____	Vashon	0550

Department at O'Fallon Center.

Accounting	01	____	Machine Shop	16	____
Aeromechanics	02	____	Plumbing	17	____
Automechanics	03	____	Printing, Letter.	18	____
Auto Body Repair	04	____	Printing, Offset	19	____
Cabinet-Millwork	05	____	Radio-Television	20	____
Carpentry	06	____	Secretarial	21	____
Child Care	07	____	Sheet Metal	22	____
Clerical	08	____	Welding	23	____
Commercial Art	09	____	Automechanics,Br.	51	____
Cosmetology	10	____	Auto Body, Br.	52	____
Data Processing	11	____	Comm.Cooking, Br.	53	____
Drafting,Arch.	12	____	Cosmetology,Branch	54	____
Drafting,Mach.	13	____	Dry Cleaning,Br.	55	____
Electricity	14	____	Ind. Sewing, Br.	56	____
Horticulture	15	____	Shoe Repair,Br.	57	____

Attend O'Fallon Center: In the morning ____   In the afternoon ____

Do you now work part time at any job?   ____ Yes   ____ No

Is your part time job in the same kind of occupation as your shop work at O'Fallon?   ____ Yes   ____ No

If you work part time, write in the number of hours worked each week.   ____

In answering the following items, place an X in the space that describes how you feel.

	Yes	No
Has riding the bus to and from O'Fallon kept you from having enough time for lunch?	____	____
Has riding the bus to and from O'Fallon kept you from getting to your classes on time?	____	____
Have you received enough assistance from your counselor at your home high school about the Co-op program?	____	____
Are you satisfied with your present department choice?	____	____
Do you want additional help in vocational planning?	____	____
Are you satisfied with your opportunities to use the equipment and materials in your shop?	____	____
Do you receive enough supplies and/or materials to complete class projects?	____	____
Are you satisfied with the amount of individual attention and assistance received in your shop?	____	____
Have you been able to make friends with students from other schools while attending O'Fallon?	____	____
Have you been able to keep your friends at your home school while attending O'Fallon?	____	____
Has attendance at O'Fallon interfered with your participation in extracurricular activities at your home high school?	____	____
Would you recommend the Co-op program to other students who desire technical training?	____	____
Are you planning to continue in the Co-op program?	____	____

	GOOD	AVERAGE	POOR
I believe that my progress in learning how to use hand tools and equipment is:	_____	_____	_____
I believe that my progress in completing the jobs listed on the shop progress chart is:	_____	_____	_____
I believe that my overall progress toward becoming a skilled worker is:	_____	_____	_____
I believe that the instruction offered Co-op students is:	_____	_____	_____
I believe that my progress in classes at my home high school is:	_____	_____	_____

If you would like to write additional comments to tell us how you feel about the Cooperative Program at O'Fallon, please use the space below. We welcome any suggestions you have which will help us think about how the Cooperative Program may be improved.

COMMENTS:

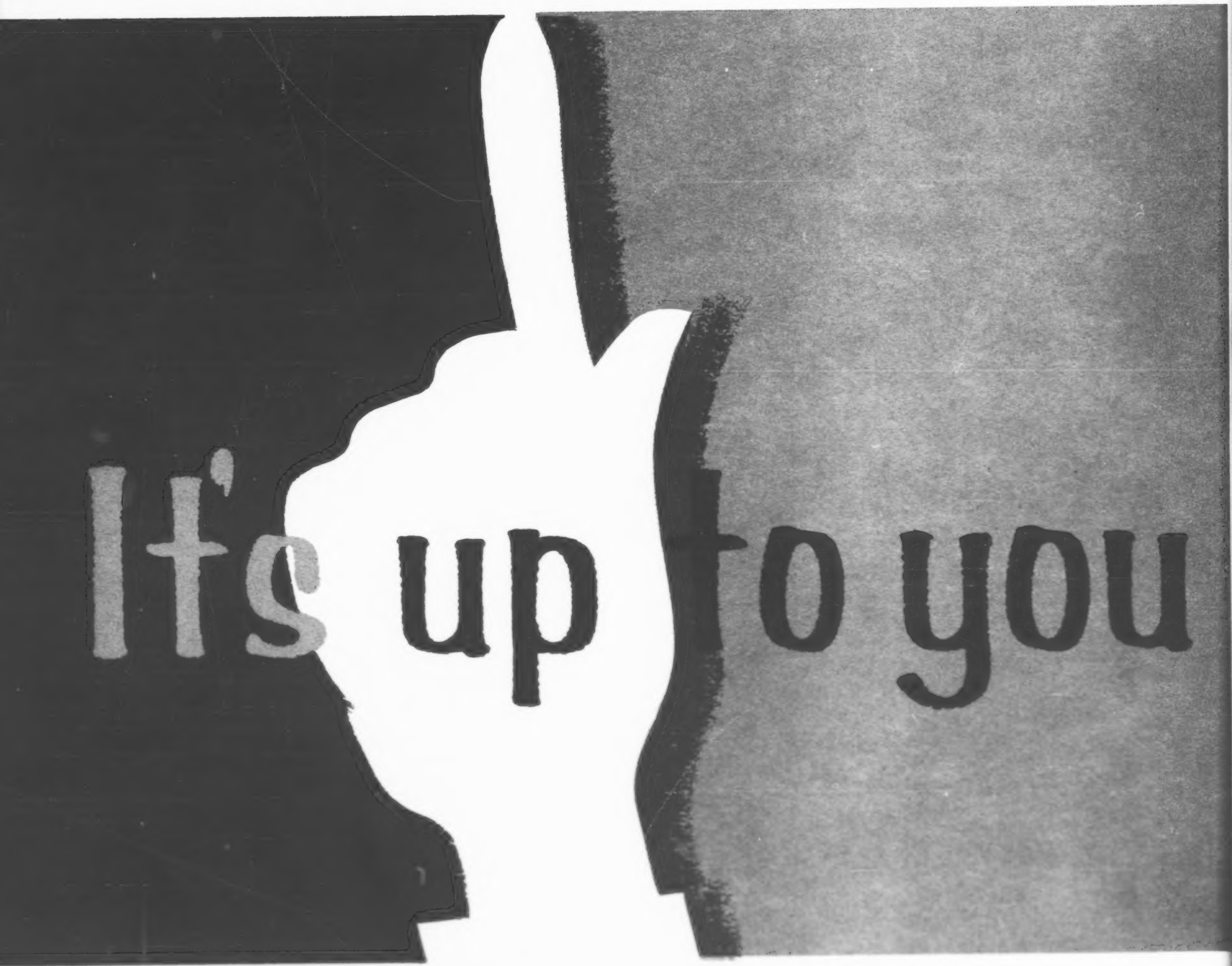
Thank you very much for your cooperation in completing this questionnaire.

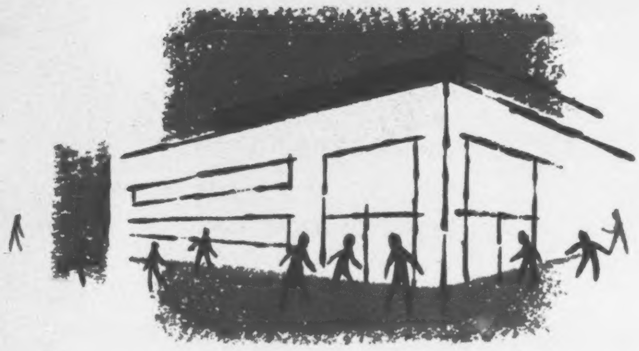
APPENDIX II

AN $11,000,000 ADDITION

APPENDIX III

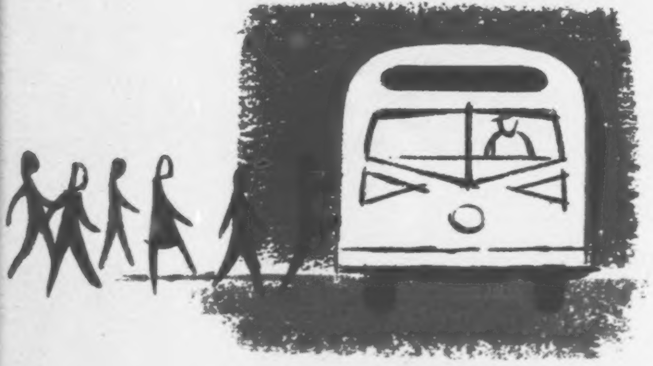
IT'S UP TO YOU


It's up to you



When you finish the eighth grade you may go to both your neighborhood high school and to the O'Fallon Technical Center each school day. This is possible through the new O'Fallon Cooperative Program offered to all ninth grade students.

If you enroll in this program you will take your general academic subjects such as English, Science, Social Studies at your own neighborhood high school. Work in the technical departments such as Radio and Television, Business, Auto Body Repair will be done at O'Fallon. Every high school in the city will have girls and boys in the program.



You will be bused to and from each school. And . . . you will be back at your local high school in time for all after-school activities . . . including athletics.

After four years of successful work, you will graduate from your local high school with credits that allow you to get a job or, if you wish, go to the college or technical institute of your choice.

As a freshman co-op student your ninth grade program at the Center will include two periods each day in the department of your choice and one period daily in mathematics.

When you reach the tenth grade . . . and from then on . . . all of your school time at the Center will be spent in technical and business classes.

If you want to find out more about the new O'Fallon Cooperative Program talk to your teacher or counselor.

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If you choose...

ACCOUNTING

The Work You Will Do . . .

Accounting clerks are employed in every kind of business to keep systematic and up-to-date financial records. They record day-to-day business transactions in journals, ledgers, or other accounting forms and prepare summaries that show the amount of money involved. In smaller companies the records are kept by hand with the help of an adding machine. In large firms the accounting clerk uses calculators and automated business machines.

How Much Money You Will Make . . .

Average pay for accountants as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	\$ 65 to \$ 75
Experienced workers . . .	\$ 80 to \$130

The Studies You Will Take . . .

You will learn office routines and the special terms used in business record keeping. You will practice with different record forms, learn typing and the use of adding-calculating machines. You will work out business problems in class by hand and on automated business machines.

AEROMECHANICS

The Work You Will Do . . .

There are many kinds of jobs in the aircraft industry, but in the St. Louis area most of them are in manufacturing. In this work mechanics shape parts from sheet metal either by hand or by machinery for airplanes, missiles, and spacecrafts. The hand work is done with tools designed for this purpose. The more experienced and skilled craftsmen assemble complicated parts which must fit perfectly. They also assemble and repair hydraulic and electrical systems of the aircrafts.

How Much Money You Will Make . . .

Average pay for aeromechanics as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	\$ 80 to \$ 95
Experienced workers . . .	\$100 to \$220

The Studies You Will Take . . .

You will learn to use the special hand and machine tools of the trade. You will study the different kinds of metals, read blueprints, and put together the various parts—fastening them with rivets, bolts, solder, or cement. You will learn to remove, inspect, repair, and replace aircraft parts, and you will study the hydraulic and electrical systems.

If you choose...

AUTO BODY REPAIR

The Work You Will Do . . .

Most auto body repairmen work in shops that specialize in the repair and painting of damaged automobiles and in the service departments of automobile and truck dealers. They straighten bent frames, remove dents from fenders and body panels, weld torn metal, and replace parts too badly damaged to repair. They use such tools as prying bars, hydraulic jacks, hand or air operated hammers, punches, small hand anvils, and welding equipment.

How Much Money You Will Make . . .

Average pay for repairmen as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 90
Experienced workers . . .	$135 to $200

The Studies You Will Take . . .

You will be taught the chassis (frame) and the parts that make up the running gear of an automobile such as brakes, steering, and rear axle assembly. You will learn shop safety and the use of the special tools used in repairing. You will develop skill in welding, brazing, grinding, finishing, and painting.

AUTOMECHANICS

The Work You Will Do . . .

Automobile mechanics work in repair shops, in the service departments of new and used car dealers, in gasoline service stations, in garages operated by the federal, state, and local governments, and in the shops of companies that own a large number of automobiles, buses, and trucks. They locate the cause of auto trouble and correct it by adjusting, repairing, or replacing defective parts. They use motor analyzers, electrical test meters, and wheel alignment machines as well as many hand tools.

How Much Money You Will Make . . .

Average pay of automechanics as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 90
Experienced workers . . .	$135 to $200

The Studies You Will Take . . .

You will be taught shop safety, the workings of a combustion engine, and how to use both hand and machine tools. You will study the chassis (frame), running gear (brakes, steering mechanisms, transmission, differential and rear axle assembly), and the engine. Later, you will use your skill in the "practice garage" working on customers' cars.

CABINET AND MILLWORK

The Work You Will Do . . .

Cabinet and millworkers are employed in plants which manufacture doors, window sash and frames, fixtures, and furniture. They operate power tools to cut and shape lumber into the finished product.

How Much Money You Will Make . . .

Average pay of cabinet makers and millworkers as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 80
Experienced workers . . .	$150 to $170

The Studies You Will Take . . .

You will learn to use hand tools and set up and operate woodworking machinery. You will also learn the qualities of various kinds of lumber and the methods of fitting and gluing parts together.

CARPENTRY

The Work You Will Do . . .

Carpenters are employed in almost every type of construction work. They erect the wood framework of buildings which includes subflooring, sheathing, partitions, floor joists, studding, and rafters. They work indoors installing paneling, moulding, cabinets, window sash, door frames, and doors. They erect scaffolding and place the heavy timbers used in the construction of docks and railroad trestles.

How Much Money You Will Make . . .

Average pay for carpenters as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 80 to $115
Experienced workers . . .	$150 to $225

The Studies You Will Take . . .

You will learn to use hand and portable power tools and to classify, grade, and use wood and wood fasteners. You will work on building foundation forms and frames for walls, doors, and roofs. You will practice covering walls and roofs, applying exterior and interior finishes. You will build stairs, install cabinets, and read blueprints.

CHILD CARE

The Work You Will Do . . .

There are many job opportunities for Child Care Aides or Assistants in nursery schools, child day-care centers, hospital and therapy centers, recreational facilities and kindergarten programs. In these professionally operated organizations, you will work with children, help them with their behavioral problems and assist them to meet their needs.

How Much Money You Will Make . . .

Average pay for Child Care Aids as reported in January, 1969, shows:

	Range Per Week
Beginning workers . . .	$ 90 to $100
Experienced workers . . .	$130 to $140

The Studies You Will Take . . .

You will learn about the growth and development of children, their behavior patterns, their needs and characteristics, and the techniques of child supervision. Later, you will put these skills into practice in a Child Care laboratory.

If you choose...

CLERICAL

The Work You Will Do . . .

Clerks and office workers are employed in every kind of business. At first they may perform such jobs as messengers, file clerks, typists, receptionists, cashiers, and office machine operators. However, there are opportunities to advance for those who have the necessary training and are willing to take on additional responsibilities.

How Much Money You Will Make . . .

Average pay for clerks and office workers as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 75
Experienced workers . . .	$ 80 to $130

The Studies You Will Take . . .

You will be taught office routines, desirable office habits, and correct business practices. You will get typewriting, accounting, and clerical experiences in rooms equipped for training cashiers, stock and inventory clerks, file and records control clerks, and payroll clerks. You will choose specific training in such areas as adding-calculating machines, comptometry, key-punch operation, duplicating, receptionist-switchboard, machine dictation or transcribing machines.

COMMERCIAL ART

The Work You Will Do . . .

Most commercial artists are employed by advertising agencies, commercial art studios, printing and publishing firms, television and motion picture studios, and other business organizations. Some work as freelance artists, selling their work to any available customers. Commercial artists develop the art for an advertising plan, doing the lettering and drawing as needed. They also design the layout for magazines, newspapers, fashion illustrations, and greeting cards.

How Much Money You Will Make . . .

Average pay of commercial artists reported as of October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 85
Experienced workers . . .	$125 to $200

The income of freelance artists has a wide range because it depends on the amount of work sold, the price the artist can get, and the nature of the artwork.

The Studies You Will Take . . .

You will learn basic art forms, lettering, perspective, and texture. You will have object drawing, figure drawing, colors and coloring, and advertising design and layout. The mechanical phases of artwork are taught and practiced. You will develop skill in the many methods and procedures needed in production work.

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COMMERCIAL COOKING

The Work You Will Do . . .

Most cooks and chefs work in restaurants, but some are in schools, government agencies, manufacturing plants, and private clubs. A cook prepares such foods as soups, meats, vegetables, and desserts. He estimates food requirements and is responsible for ordering them. He makes up the menus (list of foods to be served) and even carves the meat and places portions of food on serving plates.

How Much Money You Will Make . . .

Average pay of cooks and chefs as reported in October, 1968, shows:

	Range Per Week
Beginning workers	$ 50 to $ 80
Experienced workers . . .	$115 to $165

A few famous chefs earn very high salaries.

The Studies You Will Take . . .

You will learn professional food preparation through actual practice in a well-equipped kitchen. Lessons are given in baking, broiling, and other methods of preparing food. You will learn the use and care of kitchen equipment and the selection and storing of food.

This program is offered at the O'Fallon Branch in the Vashon High School Building only.

COSMETOLOGY

The Work You Will Do . . .

Cosmetologists provide a variety of personal services relating to the care of the hair, skin and nails. They shampoo, cut, style, straighten, bleach and tint hair, as well as give permanent waves. These workers are able to give scalp treatments, facials and manicures, to shape eyebrows and to clean and style wigs.

How Much Money You Will Make . . .

Average pay for cosmetologists as reported in October, 1968, shows:

	Range Per Week
Beginning workers	$ 65 to $ 80
Experienced workers . . .	$ 90 to $140

Some cosmetologists are paid on a straight commission basis, others receive a salary plus commission and, still others, a straight salary. Many operate their own shop and have excellent income.

The Studies You Will Take . . .

You will be taught the theory and science of all phases of Cosmetology. You will have an opportunity to practice all of the necessary skills in a modern shop. Graduates are fully prepared for the State Board of Cosmetology Examination which must be passed in order to obtain a license to practice.

In order to meet the present requirements of the State Board, girls must be 17 years old to start the course.

DATA PROCESSING

The Work You Will Do . . .

"Data processing" includes many operations required in handling information through the use of electronic machinery. Jobs are found in many businesses and in service centers which process data for other firms. The work is carried on by **keypunch operators, data typists, console** or **computer operators** and a **programmer.**

How Much Money You Will Make . . .

Average pay of data processing personnel as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 70 to $ 85
Experienced workers . . .	$100 to $240

A highly-trained and experienced programmer earns much more than the operators.

The Studies You Will Take . . .

You will be taught the data processing procedures through actual experience. You will learn to wire the control boards which tell the machine what to do. You will run the cards or tapes through the appropriate machine. You will learn proper office procedures, the handling of business forms, the operation of more simplified office machines, and the application of accounting and related business skills. You will learn about computers and their uses.

DRAFTING

The Work You Will Do . . .

Draftsmen are employed in manufacturing plants, in construction firms, and in the public utilities. They take the ideas, rough sketches, lists of equipment and figures given them by architects, engineers, and designers, and make the detailed drawings needed in the manufacturing of the products. To prepare their drawings, draftsmen use such instruments as compasses, dividers, protractors, triangles and scales (rulers).

How Much Money You Will Make . . .

Average pay of draftsmen as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 70 to $100
Experienced workers . . .	$115 to $200

The Studies You Will Take . . .

You will be taught lettering, drawing to scale, as well as pictorial and sectional drawing. You will learn to prepare and complete detailed drawings. You will design simple parts of machinery or portions of a building.

DRY CLEANING

The Work You Will Do . . .

Clothing maintenance workers are employed in dry cleaning plants, clothing stores, tailor shops, clothing manufacturers, hotels, and department stores. They operate machines that clean clothes, use chemicals to remove spots and stains, and equipment that restores materials to their original appearance. There are jobs as receptionists, spotters, wool and silk finishers, inspectors, and assemblers. Some perform clerical duties, also.

How Much Money You Will Make . . .

Average pay of clothing maintenance employees as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 75
Experienced workers . . .	$ 80 to $100

The Studies You Will Take . . .

You will learn the basic chemistry relating to the fluids used in spot removal, methods of dry cleaning, pressing techniques, spotting, care of equipment, business practices, and customer relations.

This program is offered at the O'Fallon Branch location at Vashon High School Building only.

ELECTRICITY AND ELECTRONICS

The Work You Will Do . . .

Electricians work on commercial and residential construction, plant maintenance, in appliance repair shops or service departments of large stores, and for factories making electronic products.

They install and test lighting fixtures, electrical equipment, and wiring circuits used in electrical systems in building. They repair electrical appliances such as toasters, percolators, and washing machines, and assemble electronic parts for television sets, tubes, radios, and electronic computers.

How Much Money You Will Make . . .

Average pay for electricians as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 80 to $ 90
Experienced workers . . .	$110 to $250

The Studies You Will Take . . .

You will study electricity and magnetism, learn how to use hand tools, and operate the special testers and meters needed in the trade. You will work on motors and transformers, and learn power consumption with both direct and alternating current. You will trace the electric current in practice appliances and learn to find trouble spots. You will study wiring codes, learn to run wire in walls and floors and connect them to the source of power.

INDUSTRIAL SEWING

The Work You Will Do . . .

Workers of the "needle trades" are employed by manufacturers of clothing, by hat manufacturers, and by tailoring shops where alterations are made. They operate sewing machines to join, gather, hem, reinforce or decorate garments, upholstery, awnings, or textile bags. In alterations, they use a hem ripper to remove stitches and then resew the garment by hand or by use of a sewing machine.

How Much Money You Will Make . . .

Average pay of workers as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 75
Experienced workers . . .	$ 95 to $110

Highly skilled workers can earn more on a piece work basis.

The Studies You Will Take . . .

You will be taught to use patterns and prepare materials. You will learn to cut, mark, and fit. Through practice you will learn to operate industrial single and multiple-needle sewing machines and other special machines. Later, you will take part in production sewing.

This program is offered at the O'Fallon Branch location at Vashon High School Building only.

MACHINE SHOP

The Work You Will Do . . .

Machinists are employed in all kinds of plants and manufacturing businesses. They make metal parts to exact measurements, using special types of measuring tools. They operate machines such as lathes, milling machines, shapers, grinders, and saws to shape metal. Some of the machinery is controlled by electronics, and machinists must prepare the tapes which send the electronic signals through the machines.

How Much Money You Will Make . . .

Average pay of machinists as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $100
Experienced workers . . .	$140 to $200

The Studies You Will Take . . .

You will work with all kinds of metals. You will learn to use hand tools and such power equipment as lathes, drill presses, milling machines, shapers, power saws, and grinders.

PLUMBING

The Work You Will Do . . .

Plumbers work in residential and commercial buildings, factories, and schools. They install pipe systems that carry water, steam, air, liquids, or gases needed for sanitation, industrial production, and home use. They change and repair existing pipe systems and install fixtures, appliances, heating and cooling units. They bend and thread pipe, weld, solder and caulk jointed pipe systems.

How Much Money You Will Make . . .

Average pay of plumbers as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 70 to $ 95
Experienced workers . . .	$200 to $230

The Studies You Will Take . . .

You will learn welding, soldering, wiping lead joints, and the erection and dismantling of scaffolds. You will also learn to install and repair kitchen and bathroom units. In addition, you will read blueprints and study building codes and regulations.

PRINTING

The Work You Will Do . . .

Most printers work for commercial companies that specialize in printing or in publishing. Some may work in government agencies or in private firms that do their own printing. Workers in the printing industry lay out (plan) the content of each page, set type, and compose the content into final page form. They make plates from the original material for use on printing presses, print (transfer) the inked impressions to the printing surface, and finish by binding and mailing the material.

How Much Money You Will Make . . .

Average pay of printers as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 70 to $100
Experienced workers . . .	$135 to $220

The Studies You Will Take . . .

You will be taught the history of printing and its development, learn to make up (plan) and design content for a printed page through typesetting and photography, then actually do the work for the final page. You will prepare plates for the letterpress or offset press, operate the presses, and finish the job by binding the pages into pamphlet or booklet form.

RADIO AND TELEVISION

The Work You Will Do . . .

Television and radio servicemen work in shops or stores that sell and service televisions, radios, and other electronic products. They are employed also by government agencies and manufacturing firms. Many operate their own shops. They install and repair radios, television sets, phonographs, tape recorders, and public address systems. In the repair of electronic equipment they find the trouble, make necessary repairs and adjustments, and install new parts when required. In their work they use many types of testing equipment, wiring diagrams, and service manuals, as well as hand tools.

How Much Money You Will Make . . .

Average pay of radio and television servicemen as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 70 to $ 90
Experienced workers . . .	$140 to $200

The Studies You Will Take . . .

You will learn the basic principles of electricity, magnetism, and electronics. You will study power supply and work on amplifiers, tubes, transistors, and loudspeakers in order to learn their proper use. You will actually repair radios, television sets, and other electronic equipment in well-equipped shops.

SECRETARIAL

The Work You Will Do . . .

Secretaries and stenographers are employed by public and private businesses of every size and type. They record dictation with shorthand and transcribe their notes on typewriters. Some use special machines to take dictation and type the copy from a voice recorder. Secretaries also answer telephones, operate a variety of office machines, and perform numerous clerical duties. Sometimes they handle private and confidential records for their employers.

How Much Money You Will Make . . .

Average pay of secretaries as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $105
Experienced workers . . .	$110 to $180

The Studies You Will Take . . .

You will be taught office routines, desirable office habits, and correct business practices as you use modern office-type equipment. Skill in writing shorthand and the use of the typewriter will be developed. In addition, you will elect specific training in such areas as machine dictation or transcribing machines, receptionist-switchboard, duplicating, adding-calculating machines or key punch operation.

SHEET METAL

The Work You Will Do . . .

Sheet metal workers are employed by firms that make and install ducts (tubes or channels) used in air conditioning, ventilating and heating, roofing, siding, partitions and metal framework. These workers cut the metal with hand snips or power-driven shears, form the metal by hand or machines and fasten the seams and joints by welding, bolting, riveting, soldering or cementing.

How Much Money You Will Make . . .

The earnings of sheet metal workers vary depending on the experience of the worker and on the type of plant in which they are employed. Average earnings as reported in October, 1968, show:

	Range Per Week
Beginning workers . . .	$ 70 to $120
Experienced workers . . .	$170 to $260

The Studies You Will Take . . .

Students are taught the principles of pattern drawing and geometric construction. They learn to layout, cut and fasten pieces of metal by following blueprints and sketches. They are given an opportunity to develop some skill by actually producing items in the shop.

SHOE REPAIR

The Work You Will Do . . .

Shoe repairmen work in shops that repair and restyle all types of shoes. The most common job is that of replacing worn heels and soles. They use such hand tools as hammers, awls and nippers, as well as power operated sole stitchers, buffers and grinders. More experienced and skilled workers may design, make or rebuild special shoes to a doctor's prescription. Repairmen who operate their own shops have managerial and sales responsibilities, make estimates, keep records, and may supervise the work of others.

How Much Money You Will Make . . .

Average pay of shoe repairmen as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 65 to $ 80
Experienced workers . . .	$ 90 to $150

Shoe repairmen who operate their own shops often earn very high salaries.

The Studies You Will Take . . .

You will be taught shoe construction, the kinds and uses of leather, the care and use of tools and the techniques for repairing shoes in a classroom equipped as a modern shoe repair shop.

This program is offered at the O'Fallon Branch in the Vashon High School Building only.

WELDING

The Work You Will Do . . .

Welders are employed in manufacturing industries building automobiles, missiles, spacecraft, airplanes, and household appliances. They work on the construction of bridges and all types of buildings, and in the repair of broken metal parts. The work is performed by hand and machine with the use of electricity and/or various gases such as acetylene, oxygen, helium, argon and carbon dioxide. In welding and cutting such metals as iron, steel, bronze, aluminum, and nickel, welders use torches, gas tanks, welding machines, measuring tools, and blueprints.

How Much Money You Will Make . . .

Average pay of welders as reported in October, 1968, shows:

	Range Per Week
Beginning workers . . .	$ 80 to $100
Experienced workers . . .	$140 to $240

The Studies You Will Take . . .

You will be taught how to work with all kinds of metals. You will learn how to plan, work from drawings, and safely use electric welding machines, torches, and gas flames.

(III -10)

APPENDIX IV

OPPORTUNITIES UNLIMITED

DEPARTMENT BROCHURES

Brochures that describe in depth the occupational information about departments at the O'Fallon Technical Center and at the O'Fallon Branch are available in the following areas:

Accounting
Aeromechanics
Automechanics
Cabinet-Millwork
Carpentry
Clerical
Commercial Art
Commercial Cooking
Data Processing
Drafting
Dry Cleaning
Electricity-Electronics
Industrial Sewing
Machine Shop
Plumbing
Printing, Letterpress
Printing, Offset
Radio-Television
Secretarial
Sheet Metal
Welding

A sample brochure is included in this appendix.

job prospects

LARGE RESTAURANT

- Apprentice Cook
- Specialty Cook
- Sou-Chef
- Executive Chef

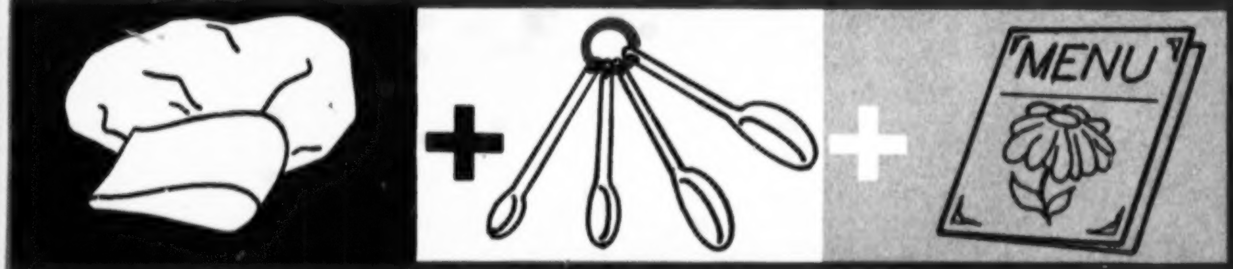
SMALL RESTAURANT

- Cook's Helper
- Working Cook
- Restaurant Manager

OTHER OCCUPATIONS

- Porter
- Bus Boy
- Waiter
- Head Waiter
- Restaurant Manager

opportunities unlimited:



= commercial cook

O'FALLON TECHNICAL CENTER

the commercial cook:

Each week St. Louisans eat one of every four meals in a restaurant. To the 6,864 cooks in St. Louis, this means an assured future.

It takes intelligence, creativity and organization to prepare three meals a day for approximately 1,000 customers, as many commercial cooks do each day.

No longer do cooks fit the "greasy spoon" image of the past. Today's cook is a market specialist, a bookkeeper, a gourmet artist, a manager and an organization man. In a large restaurant, he has a staff of eight or nine people under him—each specializes in some phase of the kitchen operation.

Most cooks are employed in restaurants, but many work in public and private schools, hotels and hospitals, manufacturing plants, private clubs—any place which serves food.

more restaurants, more chefs

As more restaurants are opened, more opportunities open up in commercial cooking. Nationally, there is a need for 20,000 to 30,000 commercial cooks in the next seven years. Locally there is a projected need for 117 cooks and bakers for the next three years.

There are many different job openings in cooking depending on the size of the establishment.

A **working chef** is a "cook of all trades" who does nearly everything in a small operation. He is in charge of the kitchen and many times the reputation of the restaurant depends on his skill. In order to work your way up in a small restaurant, you'll need to start as a cook's helper or apprentice cook.

In a large restaurant the **executive chef** is in charge of the kitchen. He writes the menu and coordinates the entire kitchen staff.

The **sou-chef** is second in command and in charge of the supervision of personnel, food preparation and serving of food. Most large operations also have a purchasing agent who buys the food. In a medium size hotel or operation a **chef steward** purchases the food supplies. Under the sou-chef are several cooks, each with his own specialty such as sandwich making, salad preparation, pastries.

Other fringe occupations are porter, bus boy, waiter, waitress and cashier.

At O'Fallon Branch you'll learn all these skills by working in a commercial kitchen set up to serve 700 to 800 people. After O'Fallon, your skills are a passport to a promising career.

What you'll learn at O'FALLON

COMMERCIAL COOKING 1

- Basic kitchen organization
- Use of tools and equipment
- Application of nutritional principles
- Menu planning
- Table organization
- Food serving
- Food purchasing techniques
- Food preservation
- Elementary food preparation
  - Breakfast
  - Lunch
  - Dinner
  - Specialties

COMMERCIAL COOKING 2

- Introduction to hotel-restaurant cooking
- Principles of sanitation
- Food storage practices
- Preparation of:
  - Beverages
  - Salad dressings
  - Basic salads
  - Meat
  - Pastries
- Services in public cafeterias, restaurants and institutions
- Breakfast cooking
- Lunch menus and preparation
- Elementary catering

COMMERCIAL COOKING 3

- Preparation of:
  - Soups and sauces
  - Special meats and meat substitutes
  - Vegetables
  - Desserts and pastries
  - Bread and rolls
- Introduction to food management
- Proper table service
- Cashiering
- Sandwich making

COMMERCIAL COOKING 4

- Diet technology
- Menu planning
- Food cost and accounting
- Food selection and buying
- Gourmet cooking
- Cake decoration
- Banquet planning and preparation
- Introduction to foreign dishes

SAINT LOUIS PUBLIC SCHOOLS

For further information,
contact your
elementary school principal,
your high school counselor
or O'Fallon Technical Center.

4

APPENDIX V

PROGRESS REPORT FOR EXPANDED PILOT CO-OP PROJECT

Prepared by:

KING M. WIENTGE, Ed. D.
University of Missouri - St. Louis
VEO Evaluation Consultant

PROGRESS REPORT FOR EXPANDED PILOT CO-OP PROGRAM

This progress report summarizes data compiled from the Questionnaire for Faculty in the Pilot Cooperative Program and the Questionnaire for Students Enrolled in the Pilot Cooperative Program which were administered to faculty and students on May 20, 1968.

Enrollment Data

Sex: Male 112 Female 45 Attend O'Fallon: AM 118 PM 39

Year in High School: 1st 1 2nd 121 3rd 34 4th 1

Age	District High					
14 - 1	Central	1	Accounting	2	Drafting	6
15 - 27	Cleveland	52	Aeromechanics	1	Electricity	11
16 - 61	Northwest	22	Automechanics	19	Machine Shop	13
17 - 49	Roosevelt	37	Cabinet-Millwork	3	Plumbing	1
18 - 16	Soldan	2	Carpentry	8	Printing	7
19 - 2	Southwest	43	Clerical	33	Radio-TV	10
20 - 1			Commercial Art	19	Secretarial	2
			Cosmetology	6	Sheet Metal	4
			Data Processing	6	Welding	5

Student Part Time Work Experience

Work Part Time: Yes 63 No 94

Work Related to O'Fallon Training: Yes 5 No 58

Number Hours Worked Weekly

Hours:	1-10	11-20	21-30	31-40	41-50
Students:	14	26	13	6	4

Instructors

Number of Instructors involved 39

Years in Teaching: (1-2) 4 (3-4) 7 (5-9) 7 (10-14) 5

(15 or more) 16

TRANSPORTATION

Students[1]

	Yes	%	No	%
Has riding the bus to and from O'Fallon kept you from having enough time for lunch?	28	18	129	82
Has riding the bus to and from O'Fallon kept you from getting to your classes on time?	10	6	147	94

Instructors

	Yes	%	No	%
Has the bus schedule kept students from getting to your classes on time?	2	5	37	95
Has the bus schedule requiring students to leave shop early presented serious problems in your shop instruction?	5	13	34	87

The transportation of students to and from O'Fallon Center has been satisfactory for most of the students and instructors in the expanded pilot program as indicated by the high percentages of favorable answers. However, a digest of the written comments by students indicates that getting to the buses on time was occasionally a problem. The students attributed the missing of buses to teachers holding the student too long in class or the bus leaving early. This suggests careful attention to time schedules for the Co-Op students when the fall program begins.

Seven students complained about the bus drivers. Five of the seven suggested getting new drivers because the drivers are too mean and crabby or authoritative. One can sympathize with the drivers.

VOCATIONAL GUIDANCE

Students	Yes	%	No	%
Have you received enough assistance from your counselor at your home high school about the Co-Op program?	125	80	32	20
Are you satisfied with your present department choice?	122	78	34	22
Do you want additional help in vocational planning?	68	44	88	56

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[1] For any item where the total of Yes responses and No responses is less than the number of students or instructors who completed the questionnaire, the difference represents the "No Responses" to the item.

Instructors

	Yes	%	No	%
Have students received enough assistance from their counselor at the home high school about the Co-Op program?	29	83	6	17

The percentage of Co-Op students who are properly placed in their present department choices is:

1-25% 4   26-50% 6   51-75% 11   76-100% 16

The percentage of Co-Op students who would profit by additional help in vocational planning:

1-25% 13   26-50% 7   51-75% 6   76-100% 7

There are substantial indications from the results obtained that additional vocational guidance would help the Co-Op students. Although 4 out of 5 students state they have received adequate assistance from their district high school counselor, 68 out of 156, or 44%, report they want additional help in vocational planning.

This is further supported by the instructor reports. Four instructors report that 25% or less of the students are properly placed and 6 instructors suggest that 50% or less are in the correct department. The optimal placement of Co-Op students is critical in the success of the VEO program in the O'Fallon Technical Center. The data collected here suggests that serious and careful consideration be given by teachers, counselors and administrators to the question of successful placement of the Co-Op student. Parents, elementary teachers and representative citizens of the community should be involved in a continuing effort to assist students in the development of their vocational goals.

INSTRUCTION

Students	Yes	%	No	%
Are you satisfied with the amount of individual attention and assistance received in your shop?	118	75	39	25
Are you satisfied with your opportunities to use the equipment and materials in your shop?	141	90	16	10
Do you receive enough supplies and/or materials to complete class projects?	125	80	31	20

	Above Avg	%	Avg.	%	Below Avg	%
I believe that the instruction offered Co-Op students is:	93	60	51	33	11	7

Instructors	Yes	%	No	%
Do you have sufficient time to give Co-Op students enough individual attention and assistance?	32	82	7	18
Do you have adequate and sufficient equipment available for training in your department?	36	92	3	8
Do you have enough materials and supplies to complete class projects?	38	97	1	3
Do you have enough audio-visual training aids and related instructional materials?	27	69	12	31

	Above Avg	%	Avg	%	Below Avg	%
The respect for and use of materials by Co-Op students is:	8	21	27	71	3	8

Nine out of 10 Co-Op students are satisfied with the opportunities to use equipment and materials and 8 out of 10 report they receive adequate supplies and materials to complete class projects. This is consistent with instructor data indicating that 92% have adequate and sufficient equipment and 97% have enough materials and supplies to do the job. However, three out of ten instructors would like more audio-visual training aids and related instructional materials.

Thirty-five out of 38 instructors rate the Co-Op students average or above in their respect for and use of materials.

In the provision of individual attention and assistance to the Co-Op students 32, or 82%, of the instructors indicate that they have sufficient time. A somewhat smaller percentage of students, 75%, or 118 of 157, feel that they receive adequate individual attention and assistance.

In general the Co-Op students feel that their instruction is satisfactory. Only 7%, or 11 of 155, reporting feel that the instruction they have received is below average. 93% believe that the instruction offered Co-Op students is average or above. On the basis of the results obtained from student responses instruction in the expanded pilot program may be categorized as good. A review of this section on instruction warrants a genuine feeling of overall accomplishment for the participating instructors in the expanded pilot program and suggests a renewed determination to individually do a better job in the new fall VEO program.

PROGRESS

Students	Above Avg	%	Avg	%	Below Avg	%
I believe that my progress in learning how to use handtools and equipment is:	80	51	73	47	3	2

PROGRESS

Students	Above Avg	%	Avg	%	Below Avg	%
I believe that my progress in completing the jobs listed on the shop progress chart is:	54	35	88	56	14	9
I believe that my overall progress toward becoming a skilled worker is:	66	42	82	52	9	6
I believe that my progress in classes at my home high school is:	39	25	91	58	27	17
Instructors						
The progress of Co-Op students in learning how to use required hand tools is:	6	19	21	66	5	15
The progress of Co-Op students in learning how to use required equipment is:	5	14	27	75	4	11
The progress of Co-Op students in completing the jobs listed on the class progress chart is:	11	31	21	60	3	9
The overall progress of the Co-Op students toward becoming a skilled worker is:	8	22	24	65	5	13

It is interesting to note that the students are more optimistic than instructors about how well they are progressing in learning to use hand tools and equipment. About half the students, 51%, rate themselves above average in this respect, while the instructors rate 19% and 14% above average respectively in using hand tools and equipment. Perhaps the most significant figure is the agreement between students and instructors, that 9% of the students are below average in completing the jobs on the progress chart.

In gauging overall progress toward becoming a skilled worker, as might be expected, more students rate themselves above average than do instructors. Again, the significant feature seems to be the closeness of both ratings for students making less than average progress. Students report 6% below average against the instructors' 13%. The Co-Op students' progress in their home high schools is satisfactory. 83%, or 130, report average to above average progress as compared to 27, or 17%, who report below average progress.

Overall consideration of the progress of the Co-Op students merits the observation that they are doing satisfactory work in their departments at O'Fallon and at the home school.

Instructors considered the Co-Op students to have satisfactory or above working relationships with the regular O'Fallon students. No instructor reported a below average rating in this area. Also the instructors generally felt that the conduct of the Co-Ops was adequate or better. Three, or 8%, reported a belief that the Co-Ops conduct was below average.

Motivation and interest of the Co-Op students and their use of class time likewise fares reasonably well. 34, or 87%, and 30, or 83% of the instructors reporting felt the Co-Ops were average or above respectively in motivation and interest and in the use of class time. Written comments of a few instructors showed concern with discipline and student selection.

STUDENT OVERALL RATING OF PILOT CO-OP PROGRAM

	Yes	%	No	%
Would you recommend the Co-Op program to other students in your home high school who desire technical training?	142	90	15	10

This is perhaps the most significant item on the Co-Op students' questionnaire. Their high affirmative response, 90% or 142, is strong evidence that the expanded pilot program is meeting a real need for these students. Written comments, totaling 26, were included on the student questionnaires. Such statements as "a very good innovation in education," "I think it's a good deal," "O'Fallon Tech is a great move" give the general flavor of student comments. There were a number of valuable suggestions, too lengthy to detail in this report. Perhaps the following statement written by a student is a good note on which to close the report. It should both challenge and encourage the instructors, counselors and administrators of the new O'Fallon Technical Center.

"In my opinion the Cooperative Program is the best thing that could happen to any student at any school. I am looking forward to coming back next year and hope many more students will join me..."

APPENDIX VI

EVALUATION QUESTIONNAIRE AND ANALYSIS

Prepared by:

KING M. WIENTGE, Ed. D.
University of Missouri - St. Louis
VEO Evaluation Consultant

O'FALLON TECHNICAL CENTER
St. Louis, Missouri

December 16, 1968

Evaluation Study

We are asking your assistance as teachers at the O'Fallon Technical Center in making a study of the problems and concerns of our students as you observe them moving through their daily schedules at the O'Fallon Technical Center and their district high school. Our program has been in operation long enough now to assess its progress and identify those problem areas that we can work at improving.

Part 1 Of particular interest to us are the concerns and problems of our students in the following areas:

a. Bus transportation
b. Student activities in the district high school
c. Lunch and related activities at this time
d. Relationships with other students
e. Scheduling - including the proper allocation of time
to get to class, locker, etc.
f. Any other problems that you feel are significant.

Part 2 In addition to the problems and concerns of the students we would like your reaction to the development of the VEO program. We have provided space for your comments and suggestions.

The attached sheets provide space and a format to be used in reporting. Our evaluation committee will analyze the data collected and report the findings to the faculty.

As you know, the first weeks or months of a new program are a very critical period in its struggle for success. Feedback from you, the teachers, will provide information that will help us and you do our job better.

Henry C. Briesemeister, Principal
O'Fallon Technical Center

Raymond J. Sacks, Director
Vocational, Technical & Adult Education

Department______________________________ Teacher______________________________

Part 1

Type of Problem (Bus travel, lunch, locker, etc.)

Frequency of Problems (check one) Occurs: frequently____occasionally____seldom____

Nature of problem (Brief description of the problem)

Possible Solution(s) (Suggest how problem might be solved)

Part 2

Comments and Suggestions Regarding the VEO Program As It Is Now Operating

Write as much as you would like concerning strengths and weaknesses of the program as related to program organization, shop climate, student motivation and aptitude, shop equipment, instructional aids, etc.

Introduction

On December 4, 1968 the faculty at the O'Fallon Technical Center was asked to initiate a census of the problems and concerns manifested by their students as they moved through their daily schedules at the O'Fallon and their district high school. It was felt that the Vocational Education Opportunities program had been in operation long enough to assess its progress and identify problem areas and emergent strengths of the total program.

A total of 69 faculty evaluation reports are included in this study. The first section, Part I, deals with the concerns and problems of VEO students as reported by the O'Fallon faculty. These student concerns were gathered on the basis of teacher contact with and observation of their students--not by canvassing them. Many of the concerns and problems of the teachers are inextricably interwoven with those of the students so that some of the problems reported at first glance may appear to be teacher complaints, when in actual fact their solution is equally beneficial to students and faculty. The problems discussed in the first section of the report are grouped under the following headings: Attendance, transportation, housekeeping, lockers, food service, instructional matters, home school, student behavior, counseling and related matters, and no problems.

The second section, Part II, of the analysis covers the general statements from the O'Fallon faculty pertaining to the operation of the VEO program insofar as they have experienced it up to the date of the evaluation.

This is a compilation of all comments and all solutions and in reviewing them the following considerations must be kept in mind. 1) Some of the problems have been either rectified or action taken to eliminate them. 2) Some of the suggested solutions may be entirely incompatible with existing system-wide policy. 3) A comment on a problem may be a statement by only one or two teachers and, therefore, may be atypical of the situation as it exists generally, 4) In preparing an analysis it is necessary to transmit lengthier statements in capsule form which may result in loss of emphasis or significance of the original statement. Apologies are offered to any who feel that a concern or problem has been overlooked or underemphasized.

Despite these limitations this type of data is excellent in that it gives an impression of what students and teachers perceive as problems, and therefore, provides a framework for scrutinizing existing policies and procedures as well as explaining or communicating existing policy to teachers and/or students.

Method of Reporting

In order to clearly picture the evaluation, after each statement of a problem or solution mentioned by teachers a number appears in parentheses. This number represents the number of teachers who reported the problem or solution in the evaluation reports.

Part I

1. Attendance

Some teachers report excessive absenteeism (8) and cutting classes (1), and the need for a stricter control (1). A return to the previous policy of suspension if unexcused absences occur for more than 5 days (3) is advocated. Instead of carrying students on attendance records for weeks during which they are absent (2) they should be withdrawn after 9 days (1). By delaying the roll call each day (2) some who are reported absent but who are actually tardy would not appear on the absence report. A better liaison between the home school and O'Fallon would be useful with more people working on attendance (1).

Tardiness is attributed to late arrival of the busses (6), missing the bus (2), eating lunch off-campus (1), purchasing food from the food vendors outside (1), and the long distance the Northwest bus travels (1). It is difficult to start classes before 10 or 15 minutes have elapsed (3) because of tardy arrivals. Recommendations include stronger disciplinary measures (2), a careful check on students to be certain they are legitimately tardy (1), and a longer lunch period (2). Opening the cafeteria in the morning before school starts to sell milk and package foods would be helpful (1).

2. Transportation

Transportation problems included the late arrival of busses (6), busses being overcrowded (1), missile throwing between busses (2), and the busses returning late to the home school (1). The poor condition of the busses (1), young student behavior on the busses (1), constitute other problems. Students who drive are often late (1).

Suggested solutions offered were: the prompt dispatch of the bus from the home high school (4), allocate more transportation time for bussing (5), paint parking places in the O'Fallon parking lot by schools (1), and position busses on the parking lot so that those with the longest travel are in front (1). Other recommendations were to separate the younger student riders from the juniors and seniors (1), and to have a responsible adult ride on the busses (3). Students who are late when they drive their own car should lose the privilege and be required to ride the bus (1). Students should be granted more time to go to the locker and then catch their bus (3).

3. Housekeeping

Littering of halls and vestibules (1) can be helped by retaining students in the lunchroom until 10 minutes before the end of the lunch period (1). More trash receptacles should be placed in the vestibules and halls (1). Excessive loitering occurs in the entrance next to E building. There should be a guard stationed there at all times (1).

4. Lockers

Problems with lockers included lockers too distant (14), problems with keys (10), lockers not assigned (2), and lost keys (5). Student keys do not fit the lockers assigned (2) and students who lost keys have difficulty getting them opened (1).

Solutions suggested the assignment of lockers closer to the first and fourth period classrooms (7), replacement of the present locks with combination locks (5), have the key department operate more efficiently (2) by keeping the office open more (1) particularly during the first and fourth periods (1). Lockers located on the same floor as classes (2) would be helpful, and consideration should be given to the possibility of student help for Mr. Wolfe (3).

5. Food Service

Food service concerns include poor service that is too slow at lunch (3), cold food (1), too short a lunch period (1) and lines too long (2). Students should remove their trays and dirty dishes (3) and should not leave the lunch room and take food to classes (1).

To solve the food service problems suggestions include: that students remain until 10 minutes before lunch period is over (1), that more help be used in the lunch room (3), and that the food and plates be kept hot (1). A study of the lunch room should disclose more efficient and better procedures (2). Students could pay a check for the tray and get the check back when they turn in the tray with their dirty dishes (1). This implies firmer student control (1). The O'Fallon lunch room is preferred by students over the home school lunch room and both AM and PM students should be fed at O'Fallon (1). Early morning students who are not bussed need a breakfast area (1) which would include a separate counter selling package items (1).

6. Instruction

There is a need for additional instructional aids (1) and teacher-made visual aids (2). Small units as work assignments are needed for class discussions (1). Not enough small tools and supplies are furnished (1), and students are not reporting to shop in proper work clothes with hand tools (2). There is a need for rulers, compasses, and protractors (2). Instruction is made more difficult by pupils who come to classes without textbooks (5). Instruction is hampered by students who fail in shop and show lack of accomplishment (3).

Solutions proposed to remedy these concerns include provision by the school of resources and supplies to encourage more teacher-made visual aids (1), the purchase of needed small tools and supplies for classes (1), the obtainance from a junk yard of small units for work (1), and setting a requirement of two weeks to be properly clothed and have the necessary hand tools (1). Students who cannot accomplish the work or lack motivation after an adequate trial should be transferred to special shops with special suitable instruction (4). The business office should be called upon to supply the needed rulers, compasses, and protractors. Pupils who come to class without textbooks often have forgotten their locker keys and need some way to get in their lockers.

7. Home School

Coop students are not allowed full participation in home school activities (6). Students reported they were not accepted in the home high school and were made to feel inferior (3). They miss auditorium sessions and drivers' ed in some schools where these are held only in the mornings (2). Teachers have received complaints about the conditions of the lunch rooms and toilets at some home high schools (2). In some high schools the students are kept at school for special meetings (2).

Better cooperation from the home high school is important (1). It would be helpful to have all announcements repeated at the home school during the AM and PM in order to keep all Coops informed (2). Perhaps activities could be planned differently in the home high school to give the Coops full privileges or equivalent privileges (4). The unclean and unsanitary schools should be reported for inspection (1). Students should not be charged with absences when they are retained for meetings in the home school (1). The administration at the home school should be contacted and worked with for closer cooperation (1).

8. Student Behavior

Student behavior problems include low morale and spirit (4), carrying coats to classes (7), adjustment of the 9th graders to two high schools (2), rumors such as a group planning to turn over a bus (2), 9th graders in class with no books (1), and inter-school sports rivalry. Other concerns are: occasional continued disruptive behavior in class (1), the use of record players (1), smoking (1), and students who come to school ill (1). What can be done to aid the high achieving Negro student called Tom by his Negro classmates (1)?

Suggested remedies include stress on the importance of achievement (1), and improved counseling (1), the development of improved student spirit at O'Fallon via such means as aud sessions and a monthly newsletter (1). Perhaps team teaching would help (1). Counselors and teachers should devote time to orientation in the early weeks of the semester, particularly with the 9th graders (2). To discount the spread of rumors a truth squad is needed to go to the home school and squelch rumors (2). Coats in classes can be diminished by effective locker utilization (2), and firm teacher control (1). To combat inter-school sports rivalry a special role should be emphasized for O'Fallon students (1). Students who evidence continued bad behavior should be suspended (1), use of record players needs continued stringent controls (1), and students who come to school ill should be sent home (1). Smoking should be eliminated or a supervised smoking lounge provided (1).

9. Counseling

A number of students are unhappy with their program (1) which is due largely to a weakness in high school counseling (2). A 9th grader who does not want his VEO program has difficulty in seeing the home school counselor (1). Many counselors in the home schools are not vocationally oriented (1). At O'Fallon the 9th grader has to see too many people (1) - one for early dismissal, one for tardy slips, a counselor, a coordinator, one for cuts of classes. Better vocational guidance in the 8th grade is important (1). Ninth graders are forced to make a vocational choice too early (1). Students are not adequately informed at the 8th grade level (2). High school counselors should be invited to O'Fallon so they can advise students more adequately (1). Counselors at the home high school are not adequately informed, about all they do is list the shops (1).

Graduation requirements are not clear to students (1). Students are confused about the credits they earn in the VEO (1). Counselors should be trained to inform the students of the credit requirements (1). A record of the VEO work should be a part of the transcript or by a certificate of achievement (1).

In the matter of scheduling the 9th grade, shop classes have a split schedule (3), and seniors are assigned to shop classes for one year (1). Two hour shop classes are much preferred for efficient instruction (3), and at least two years is needed in shop to adequately do the work (1).

9. No Problems

Seven returns listed no problems.

PART II

The comments and suggestions under Part II lend themselves to generalization under the headings: overall appraisal, student characteristics, school climate, instructional facilities, and vocational choice and placement. Thirty four reports from teachers carried comments under Part II. Reports classified as generally favorable (33) far exceeded those classified generally unfavorable(1).

1. Overall Appraisal

Favorable overall comments emphasized that the program was just great, exciting and stimulating (3). It is basically very good (1), constitutes an improvement and will get better (4). The year has gotten off to a good start and is running smoothly (12). Teachers and students are showing good attitudes (1) and good comments are heard from teachers and students (1).

2. School Climate

The school climate is quieter (1) and there is a general appearance of a program working (2). There is an improved climate for learning (4) and the keener intra-class competition is stimulating. Disciplinary problems are fewer (6).

3. Instructional Facilities

There has been a new strength developed for O'Fallon programs (3) through the excellent equipment and instructional aids (5) which are now available or will soon be operational.

4. Student Characteristics

Student selection is better (2). Selection across-the-city results in better classes (2). Enrolling students immediately from elementary school is an advantage (2). Student attitudes are more favorable (2), morale is higher (1) and students are satisfied and interested (2). Students' improved morale and attitudes boosts teachers' morale (1).

Adverse comments stated that the student selection had not improved (1) and that students were not happy and were poorly motivated (2).

5. Vocational Planning and Placement

Greater emphasis on vocational education is now occuring in elementary and secondary schools (1). A strength of the program is that the student is able to make a shop choice (1). The concern for student placement is encouraging (1). Continuing to increase employer contacts (1) and bringing individuals in from the community to see the VEO program is advantageous (1).

Summary

In Part I this analysis has attempted to summarize the problems and concerns of students as reported by teachers as well as the solutions suggested by teachers to aid in the solution of the reported problems and concerns. Some of the problems have already been corrected, others are a matter of continuing study and certainly a few others will continue to exist for a variety of reasons. The sharing of the problems and proposed solutions through an analysis of this type highlights for administration and faculty the many varied problems that exist in a complex social organization such as exists in the O'Fallon Technical Center. The good will and effort of all can do much to bring about continuing improvement over time.

The analysis in Part II reflects the generally positive comments and attitudes of a concerned and interested faculty. The new VEO program is viewed as one with real future potential and one which promises decided improvement in school climate and instructional facilities, student characteristics and teacher opportunity, in comparison with the immediate past years. It seems fair to report optimism and a forward looking expectation of success in the months and years ahead.

APPENDIX VII

CITY WIDE ADVISORY COMMITTEE

CITY-WIDE ADVISORY COMMITTEE

Mr. William M. Alexander
Retired Businessman
4272 Washington Avenue
St. Louis, Mo. - 63108

Mr. Brooks Bernhardt
Inorganic Chemicals Division
Monsanto Chemical Company
800 N. Lindberg Blvd.
St. Louis, Mo. - 63166

Mr. Edward Coffey
Educational Director of the
United Automobile Workers
130 S. Bemiston Road
St. Louis, Mo. - 63105

Mr. Charles DeLargy
Metropolitan Area Manager
Missouri State Employment Services
505 Washington Avenue
St. Louis, Mo. - 63101

Mr. William E. Douthit
Urban League
4401 Fair Avenue
St. Louis, Mo. - 63115

Mr. Oscar A. Ehrhardt, President
AFL-CIO Council
1401 Hampton Avenue
St. Louis, Mo. - 63139

Mrs. Pearle Evans, Commissioner
Division of Community Services
Civil Courts Building
12th and Market Sts.
St. Louis, Mo. - 63101

Mr. Ludwig Hammer
Industrial Engineer
Proctor and Gamble Mfg. Co.
169 East Grand Avenue
St. Louis, Mo. - 63107

Mr. John E. Hinkson, Director
Training Education & Safety
Associated General Contractors
6301 Knox Industrial Drive
St. Louis, Mo. - 63139

Mr. James D. Idol, Assistant to the
President - Chamber of Commerce
of Metropolitan St. Louis
224 N. Broadway
St. Louis, Mo. - 63102

Mr. Fred Karches, Director
Work Opportunities Unlimited
1700 S. Second St.
St. Louis, Mo. - 63104

Mr. Arthur J. Kennedy
Director of Model Cities Agency
City of St. Louis
1206 Market St.
St. Louis, Mo. - 63103

Fr. John Klocker, Principal
DeAndreis High School
Clarence & Carter Ave.
St. Louis, Mo. - 63115

(Representing Fr. John Leibrecht,
Ass't. Sup't., Secondary Education,
Catholic Schools)

Mr. John Lawrence, Coordinator, ESEA
State Department of Education
Division of Public Schools, P.O.Box 480
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Honorable Theodore D. McNeal
Missouri State Senator
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Mr. K. C. Meyer, Superintendent
Lutheran High Schools
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Mr. John Miller
Vice President-Production
Nooter Corporation
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Mr. B. W. Robinson
Assistant Commissioner
Division of Vocational Education
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Executive Vice President
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Mrs. Adella T. Smiley
Board Member
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7 Windemere Place
St. Louis, Mo. - 63112

Mr. Fred Speckmann
Ass't Directing Business Representative
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Mr. Elmer Weber
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Dr. King Wientge
Professor of Education
School of Education
University of Missouri
St. Louis Campus
8001 Natural Bridge
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APPENDIX VIII

DEPARTMENT ADVISORY COMMITTEES

DEPARTMENT ADVISORY COMMITTEES

Aeromechanics Department

Jack E. Daly	Vice President, Essex Mfg. Co.
Russell Davis	Business Repr., International Assn. of Mach. and Aerospace Workers
Andrew L. Depke	Corporate Employment Mgr., Emerson Electric Co.
James House	Urban League
Jack Laws	Laws Rental Service
Eugene J. Pfautsch	Supervisor, Training, McDonnell-Douglas Corp.
Warren Smover	Personnel Mgr., Vickers Inc.

Automechanics-Auto Body Department

Nelson Briner	International Assn. of Machinists, Local 777
Ray Collier	Collier Bros. Auto Body
Don Gilbert	Vice President, Gilbert Buick
Edgar M. Hayward	Executive Vice Pres., Greater St. Louis Auto Dealers Assn.
Robert S. Lemen	BeMac Transport Co.
Don Lovelace	Service Mgr., Grebe Oldsmobile
Warren Niebling	Niebling Auto Repair

Business Education

Lee M. Agee	South-Western Publishing Co.
Clyde Currin	Urban League
William Fischer	Personnel Mgr., General American Life Insurance Co.
A. L. Hooper	Personnel Mgr., Laclede Steel Company
Charles Newman	Director of Business & Office Occupations, State Department of Education
Charles Paige	Personnel Mgr. - Corporate Sec'y. Doane Agricultural Service Inc.
Mrs. Mary Schaff	Employment Supr., Southwestern Bell Telephone Co.
Miss Mary Witherow	Consultant, Business and Distributive Education

Cabinet-Millwork Department

Michael Heilich	Business Repr., Carpenters District Council
Ray Kuecker	Supt., Gravois Planing Mill Co.
James Kuhl	Supt., Peterson Planing Mill Co.
Ollie Langhorst	Executive Secretary, Carpenters District Council
Jay Rovak	President, St. Louis Fixture Mfg. Co.
William Schettel	President, Loughman Cabinet Co.
Frank Young	Deforest Wood Products Mfg. Co.

Carpentry Department

Henry W. Berry	Urban League
Robert Bush	Bunce Building Corporation
Glen Jackson	Willingham Construction Co.
Robert Koenig	Dickie Construction Company
Ollie Langhorst	Executive Secretary, Carpenters District Council
Erwin C. Meinert	Executive Secretary (Retired) Carpenters District Council
Edward Thien	Business Repr., Carpenters District Council
Aaron Turnbull	Westlake Construction Co.

Child Care Department

Helen Jones	Gables Pre-Kindergarten Nursery School
Susanne Macdonald	Consultant, Home Economics, St. Louis Public Schools
Sister Mary O'Brien	St. Joseph's Hospital
Nelle M. Sailor	Project Nutritionist, Health Center
Patsy Tennison	Supervisor, Home Economics, Kansas City Public Schools

Commercial Art Department

Ronald Brummell	Display Mgr. Stix, Baer & Fuller
Dorothy Busch	Urban League
Lillian Brune	Publicity Director,Concordia Publishing House
Russell Hughes	O'Bota Studios, Inc.
Larry Weaver	Larry Weaver Advertising Art

Cosmetology Department

Edna Emme	Education Board, National Hairdressers and Cosmetology Assn.
Hans Gruendl	National School of Cosmetology
Jack LaPlante	Legislative Representative, N.H.C.A.
Dixie Lee Rosenthal	Pres., St. Louis Chapter, N.H.C.A.
Norma Trobbe	Executive Secretary, St. Louis Chapter, N.H.C.A.

Data Processing

James J. Belgeri	U. S. Department of Agriculture
Maxine Bell	Data Processing Mgr., Commonwealth Life and Accident Insurance Co.
Robert L. Bergmann	Vice President, Mercantile Trust Co.
Neal Dohr	McDonnell Automation Co.
Edward Hackman	Manager, Data Processing, International Shoe Corporation

Data Processing - continued

Joseph Loncaric	Statistical Tabulating Corporation
Roy McKinney	Data Processing Mgr., Reliable Life Ins. Co.
George Prosser	American Lithofold Corporation
Ronald Waeckerle	Asst. Dist. Accounting Manager, Southwestern Bell Telephone Co.

Drafting, Architectural

Leonard Kostecki	Manske & Dieckmann
James Pace	Mississippi Valley Structural Steel Co.
Ed Robson	Robson-Schilling & Associates
Charles R. Triplett	Schmelig Construction Co.
Edward Turner	Construction Control Inc.

Drafting, Machine

Ralph Chambers	Barry-Wehmiller Co.
Melvin Kohl	Moloney Electric Co.
Salvatore Ruffino	Nooter Corporation

Dry Cleaning

Jerry Gers	Past President, Dry Cleaners Exchange Paris Cleaners
John Green	Urban League
Emileo Horton	Executive Secretary, St. Louis Dry Cleaners Union
Eugene Morgenthaler	Director, St. Louis Dry Cleaners Exchange Morgenthaler Cleaners
Dan Prindible	Kirkwood Laundry & Cleaners
Loretta Reinhardt	Secretary, St. Louis Dry Cleaners Guild Delmar Cleaners
Harvey Rimell	Director, St. Louis Dry Cleaners Exchange Rimell's Cleaners & Tailors
Arnold Witte	Vice President, St. Louis Dry Cleaners Exchange Manager, Westover Cleaners & Furriers

Electricity

A. W. Burkhardt	Dazor Manufacturing Corp.
John T. Hallenburg	Quality Electric Co.
Bruce Kaemmerlen	Kaemmerlen Electric Co.
George Kelsch	Bel-Nor Electric Co.
Eugene J. Pfautsch	Supervisor, Training McDonnell-Douglas Corp.
Roy Sachse	Electrical Workers Local No. 1
Wilber A. Stuart	Urban League

Food Service Department

Joseph Brown	Sec'y.-Treas. Cooks & Pastry Cooks Local 26
Dr. Floyd Carroll	Chief, Food Control Section St. Louis Health Department
Helen Davies	Extension Home Economist, University of Missouri
Michael Fandos	President, Missouri Restaurant Association
Jack E. Miller	Forest Park Community College
David Page	Director of Food Services, St. Louis Public School
Henry Ruggeri	President, St. Louis Restaurant Owners' Assn.
Lee Schoenbrum	Manager, Chase-Park Plaza Hotel
Brother Leo Slay,S.M.	President, Food Service Executives Assn.
Jan Verdonkschot	Chef, Missouri Athletic Club

Horticulture Department

Dr. Derek Birch	Educational Director, Missouri Botanical Gardens
Robert Gillespie	Horticulture Dept., Meramec Community College

Industrial Sewing Department

Mannie Cutler	Country Set Sportswear
Sidney Frager	Frager Bros. Mfg. Co.
Henry Iglauer	Sel-Mor Garment Co.
Joe Moore	Jo-Mor Classics Inc.
Dan Robbins	Business Repr., International Ladies Garment Workers Union
Martha Williams	Urban League

Machine Shop Department

Eugene J. Pfautsch	Supervisor, Training, Mc-Donnell-Douglas Corp.
Frank Pogorzelski	Senior Engineer, McDonnell-Douglas Corp.
Willis Pottoff	Emerson Electric Co.
Bill Sheublein	Vice President, Moog Industries, Inc.
Ralph Vogt	Ashby Manufacturing Co.
Russell Davis	Business Repr., International Assn. of Machinists & Aerospace Workers District No. 9

Plumbing Department

Larry Knoll	Executive Sec'y. Plumbers' Union Local No. 35
Len Meiners	Meiners Plumbing Co.
William Millaway	Plumbing Inspector, City of St. Louis
J. A. Sheehan	J. Sheehan Plumbing Co. Inc.
Glen Speiser	Director, Apprenticeship Education, Plumbers Union Local No. 35

Printing Department, Letterpress Division

Harold Axtell	A. R. Fleming Printing Co.
Frank Furlong, Jr.	Furlong Printing Co.
H. J. Hempen	President, St. Louis Typographers Assn. Graphique Typographers
John Ilewski	President, St. Louis Printing Pressmen & Assistants Union No. 6
Harvey Kirchhoff	Weise-Barnes Printing Co.
Wm. Barnes O'Connor	Executive Vice Pres., Printing Industries of St. Louis
Harry B. Russell	President, St. Louis Typographical Union No. 8

Printing Department, Offset Division

Harold Axtell	Supt. of Production, A. R. Fleming Printing Co.
Albert Garber	President, County Business Services Inc.
William F. Goldstein	Director of Printing, United States Material Command
Donald Harbaugh	Production Superintendent, Commercial Letter Inc.
Cal Jack	Lithographers & Photoengravers' International Union, Local 252
Wm. Barnes O'Connor	Executive Vice Pres. Printing Industries of St. Louis
Herbert M. Ross, Sr.	Ross-Curran Printing Co.
Norman Simcox	Director of Printing, Monsanto Company
Harold J. Stoppelman	Director, Institute of Graphic Arts
Don Svoboda	Lithocraft Studios, Inc.

Radio - Television Department

Cornelius Bell	Bell Radio & Television Service
Malcolm Edwards	RCA Service Co.
Jesse Elkins	Service Mgr. Radio-TV Dept. Famous Barr Co.
Edward Glore	Urban League
Harry Kennedy	Radio-TV Dept. Famous Barr Co.
Alvin Siepman	Electrical Workers Local No. 1
William Thomas	Olympia Electronics Inc.

Sheet Metal Department

Mark Bauer	Acme Heating & Ventilating Corp.
Albert Osburg	Lyon Sheet Metal Works, Inc.
Lee Schwartz Jr.	Mound Rose Cornice & Sheet Metal Co.
Raymond Taylor	Sheet Metal Workers International Association, Local #36

Shoe Repair Department

Robert Adams	Globe Shoe Repair
Burl Chapman	Veterans Hospital
Zack T. Hogan	Famous-Barr Co.
James Pearson	Yellow Ball Shoe Co.
Joe Stone	Stone Leather Co.

Welding Department

Norman Brauss	St. Louis Car Division, General Steel Industries
Joe Hunt	Iron Workers Local No. 396
Mickey Kalaseech	St. Louis Shipbuilding & Federal Barge Inc.
John Meyer	Nooter Corporation
Cris Minda	J. S. Alberici Construction Co.
G. J. Rau	Chairman, American Welding Society St. Louis Section
Richard Flotron	Business Repr., Electrical Workers Local No. 1

APPENDIX IX

EVALUATION MODEL FOR ST. LOUIS SCHOOLS

INFORMATION FEEDBACK SYSTEM

An Information Feedback System is in operation now in the St. Louis Public Schools Title I areas. Sixty-two percent of the pupils and about half the schools are involved. The feedback system must be improved and refined but this can occur only with use and as principals, teachers, and other administrators require new information not now collected. New needs may make obsolete information now collected.

Operation of Information Feedback System. Annually each school faculty receives achievement test information (IBS - Reading, Language, and Arithmetic) on each child in grades 4 through 7. This will be expanded to grade 8 and 9 in May 1968. Grade equivalent scores are provided for each child, class, grade, school, and district. Item analysis provides a careful breakdown of the elements of, say arithmetic. It is not possible to really help a sixth grade child who scores at the fifth month of the fourth grade unless we know specifically in what areas the child is weak. Item analysis provides this crucial diagnostic information.

While class averages may show where a class is at any one time, it provides no information as to the class progress. Throughout the poverty area about one half of the children enrolled in a school in May have moved from that school by the following May. Class averages therefore tell nothing about the effectiveness of children's learning unless we have evidence on the children who remained for the whole year -- pre-tests and post-tests. These paired comparisons allow us to use each child as his own control through the device of a learning rate. The learning rate is simply calculated. The grade equivalent is divided by the number of years a child has been in school. Thus for each child, class, grade, and school learning rates can be computed. Prior learning rates can be compared to present progress. When the rate does not come up to expectations, causes may be sought and, hopefully, improvements made. A more complete discussion of the learning rate and its implications will be undertaken later.

The basic skills of learning -- reading, language, and arithmetic are all that is currently being tested. We are very much aware that a child's education involves much more than this and, hopefully, means for assessing these other areas -- the social studies, science, the arts, music and many others -- will soon be at hand. But, no matter what our inclinations may be, we dare not scatter our efforts until we are sure the vital tools of learning are well provided each child in the St. Louis Public Schools.

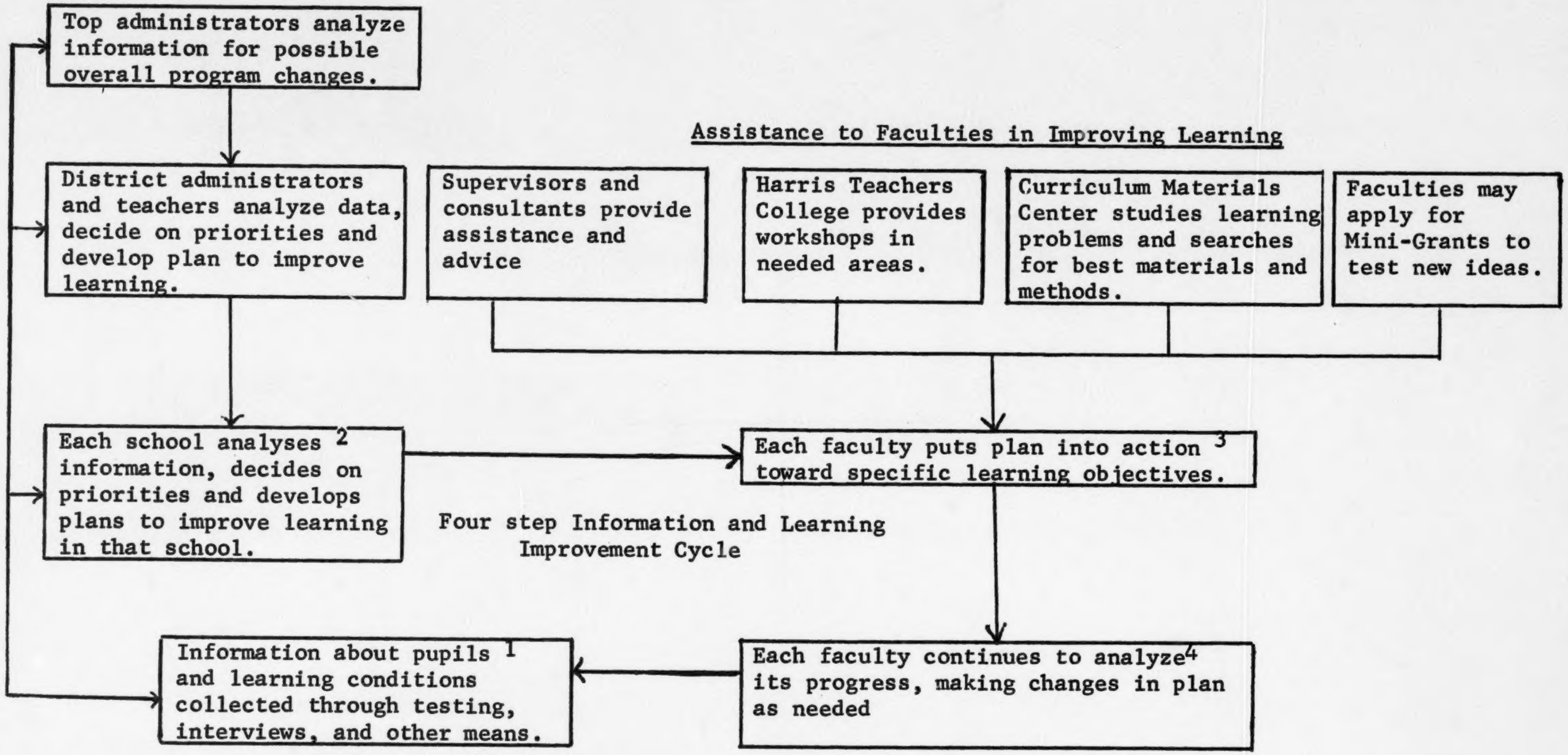
Other factors influencing pupil learning have also been assessed -- some more thoroughly than others. Some information will be provided the schools on parental attitudes. This was undertaken on a sampling basis for the elementary and secondary Rooms of Twenty. Extensive information has been provided by teachers, administrators, and pupil questionnaires. Studies of teacher turnover and attendance, pupil attendance and turnover, high school dropouts, and other factors which presumably affect pupil achievement will be reported.

All of this information is sent to school faculties, to assistant superintendents in charge of districts, and to the Superintendent of Schools. The school faculties use the information: to determine what areas are most in need of improvement, to establish priorities, and to develop plans to improve learning in the school. This information also goes to the district assistant superintendents who decide on district needs, priorities, and plans. Ultimately, the priorities of the school system, the district, and the individual school will mesh into specific plans which the faculty of each school will develop and carry out. The key role of the individual school faculty in this process cannot be overemphasized. No other personnel in the school system are as vitally involved and as responsible for the education of a specific group of children as are the teachers and principal of the elementary and secondary schools. A wide variety of services and assistance is available to help the faculties achieve their objectives.

When the instructional plans of each faculty are in operation, teachers and principal continue to analyze progress toward their objectives. As the faculty monitors its own progress it makes modifications in its plans. In this task the supervisors and other consultants perform an invaluable service. Workshops are also available through Harris Teachers College to help teachers cope with new curricular offerings, learn the skills of educational diagnoses, and help them in any other way teachers themselves want to be helped. The Curriculum Materials Center studies learning problems brought to light by the testing and searches for the best materials and methods to meet the needs uncovered by the faculties. Reading Clinics and the Division of Pupil Personnel Services also provide assistance. Faculties which want to try out new methods of attacking learning problems may apply for small grants to test the feasibility of their ideas.

Even as the year's educational program is progressing data are collected to help the faculties and the administrators make their decisions the following year. This evaluation is different from true research in a number of ways. Most important, if the evaluators see a questionable practice they immediately discuss the matter with the administrator in charge instead of waiting until the project is over. The evaluation is continuous. Evaluators are constantly visiting projects during the year to supplement the annual evaluation prepared for the schools.

INFORMATION FEEDBACK SYSTEM


Top administrators analyze information for possible overall program changes.
Assistance to Faculties in Improving Learning
District administrators and teachers analyze data, decide on priorities and develop plan to improve learning.
Supervisors and consultants provide assistance and advice
Harris Teachers College provides workshops in needed areas.
Curriculum Materials Center studies learning problems and searches for best materials and methods.
Faculties may apply for Mini-Grants to test new ideas.
Each school analyses 2 information, decides on priorities and develops plans to improve learning in that school.
Each faculty puts plan into action 3 toward specific learning objectives.
Four step Information and Learning Improvement Cycle
Information about pupils 1 and learning conditions collected through testing, interviews, and other means.
Each faculty continues to analyze 4 its progress, making changes in plan as needed

Some Assumptions

1. Education is no longer a personal option, but a societal necessity. Dropouts and underachievers are marked against each school as an indication of the schools' failure and not the failure of the child. While this point is subject to intense debate among educators, Congress and most of the population have already made up their minds. Poverty and other unpleasant social conditions have many causes but the schools must be responsible for the quality of education.

2. If improvements in education are to be made, evaluation must be in the form of immediate feedback to the schools not in the form of annual scholarly or perhaps meaningless reports to higher governmental authorities. The annual report in a highly readable form has its purposes for summary and for the long look backward but all of the uncovered information which could have been of service to the practitioner should have been provided him as soon as it was discovered. This of course invalidates the classical experimental designs so dear to the hearts of educational researchers. Floating and evolving dependent variables are untidy things to say the least. But if evaluation is to do any good, we should not wait until the end of the project to gleefully announce its deficiencies.

3. One of the major reasons for having "outside" university personnel conduct evaluations has been the implication that more objective, honest answers will be provided in this way than if school systems themselves did the job. The real problem has been that output has never been objectively defined before the projects start and these objectives have, in most cases, been discrete and separate from the total school system output factors. If a school system uses appropriate management feedback techniques to monitor its progress, it will know most of the time where it is relative to its objectives and can make changes as needed.

   Each project to be evaluated should be an integral part of the school system's production effort and its evaluation should be not only in terms of the proximate objectives of that project but also in terms of the school system's overall goals.

   Deeply ingrained in educators is the desire for improvement-- for the individual, for the school, for the school system, and for the community. To capitalize on this we should not compare one to another as is common in experiments, but rather compare an individual's, a school's, or a school system's present rate of accomplishment to its past rate. This approach avoids the problem of comparability between control and experimental groups and the danger of generalizing from such comparisons. It is common knowledge that few administrators are willing to stake their professional lives on social science data derived from research in any event.

Process Monitoring Model

Input Variables

Teachers i.e. experience (where and what), markings, age, in-service

Pupils i.e. characteristics

Curriculum i.e. content, skills methods, materials and equipment

Plant i.e. building size

School Organization i.e. ungraded primary, middle school, etc.

Community i.e. parent involvement, socio-economic characteristics (poverty, AFDC rate, juvenile apprehensions, condition of housing, etc.)

Finances i.e. a primitive sort of cost effectiveness is in planning

Output Variables

Output Variables	Indicators
Pupils	
Tool skills, knowledge of content, social and emotional growth, attitudes and interests, self-direction in terms of behavioral objectives	Tests--written performance learning rate Changes in behavior on rating instruments Questionnaires--parents, pupils, teachers Attendance Dropout rates Suspensions Changes in school vandalism rates Area delinquency rate changes Post-school employment College and post-graduate school attendance
Teachers	
Professional improvement	Workshops and courses attended
Teaching skill and instructional productivity	Supervisory reports and children's learning rate
Pride, self-respect, and enjoyment of teaching	Questionnaires and interviews
Administration	
All of the above by subordinate groupings	Above
Production of effective teachers and persons promoted to administration	Numbers of such persons

Subsumed under this model is a hierarchy of outputs. At the present time the St. Louis Public Schools are primarily focusing attention on the basic tool skills, the diagnosis and improvement of learning such skills, and increased vocational competence. Thus many of the input factors may be temporarily aimed at these outputs. This is true of our entire Title I and Title III programs. As additional funds, improved teaching skills, changes in the community occur, the output side will also change. All relationships are simply hypothesized. All must be validated for actual relationships and for continued inclusion in the model. For example, this year data is being assembled to test out relationships between teacher attendance and teacher turnover on pupil learning rates; teacher attitudes (on questionnaires) to absence and turnover; vandalism to pupil learning rates, etc. Such relationships involve whole school units and not single teachers or pupils. This flows from the assumption that a faculty in a tough slum area will be successful if it works together as a team under the leadership of the principal on specific objectives. This assumption will also be tested.

Next the Process Monitoring Model is not simply a static input-output process but rather inputs are related to outputs which must immediately determine what the new inputs will be; hence the monitoring aspect.

APPENDIX X

EVALUATION PLAN FOR VOCATIONAL EDUCATION OPPORTUNITIES

EVALUATION PLAN FOR VOCATIONAL EDUCATION OPPORTUNITIES

Submitted by: Evaluation Committee, Forrest Layne, Charles Collins, David Mahan and King Wientge

Objective

A. TO UNIFY THE LIBERAL ARTS AND VOCATIONAL EDUCATION

1. To provide a diversified vocational education for students of all ability levels.

	Criteria	Data	Method of Collection
a.	Distribution of students by departments	Number and percentages of students enrolled in departments	Obtained from entrollment data.
b.	Distribution of students in departments by track level	Number and percentages of students enrolled in department by track level	Obtained from students' personnel records
c.	Placement of students in departments according to abilities, aptitudes and interests	Information from tests and instructors pertinent to satisfactory student placement, including department changes.	Student questionnaires. Instructor questionnaires. Contacts by counselors and coordinators. Student self-referrals. Instructors' referrals of students, Guidance data obtained from student personnel records. Data from vocational aptitude and achievement tests.
d.	Metropolitan employment needs including current needs and future trends	Employment need data collected from pertinent sources.	MSES AND USES occupational information and occupational outlook information. Chamber of Commerce surveys. Census data. Labor & Industry forecasts. O'Fallon Technical coordinator reports.
e.	Awareness of ongoing diversified vocational education programs in other urban centers.	Information re new programs in other urban centers.	Pertinent publications. Office of Education approved proposals. Feedback from consultants. Feedback from national & regional meetings. Feedback from staff visitation to other urban centers.

	Criteria	Data	Method of Collection
f.	Coordination of district high school and O'Fallon Technical Center programs.	Feedback from students, instructors, administrators and coordinators.	Student questionnaires (revised). O'Fallon instructor questionnaires (revised). Coordinator reports.

A. 2. To provide student assistance in job placements.

	Criteria	Data	Method of Collection
a.	Employer and job file.	Employers of O'Fallon graduates and positions filled.	Reports of placements and contacts by instructors and coordinators. Follow-up studies - mail or personal visitation.
b.	Placement records.[1]	Employer requests--phone, mail or in person.	Correlates all placement information. Keeps file of students seeking employment. Provides space for employer-student interviews. Collected by coordinators.
c.	Counseling program.	Student applications for employment. Graduate employment record.	
d.	Counseling records.	Follow-up studies, vocational history and community participation.	Conduct follow-up studies of graduates and non-graduates.
		Student personnel data.	Collect and store pertinent student personnel data, i.e., intelligence, achievement, interest scores; biographical and socio-economic data.[2]

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[1] The coordinators' office would provide a place where students could complete applications for employment, meet with prospective employers and obtain occupational information. Prototypes of a more advanced level are college and university placement bureaus. Has possibilities for funding as an experimental unit.

[2] Test information, socio economic and biographical data on students should be collected and stored on computer tape. It is practically impossible to collect after the student leaves school and is of vital importance in long-term follow-up studies.

A. 3. To provide advanced courses in physics, chemistry, biology, mathematics and foreign languages.

Criteria	Data	Method of Collection
Advanced courses	Name of course and number of enrollees.	Obtain from enrollment data.

A. 4. To provide a guidance program for 7th and 8th grade students.

Criteria	Data	Method of Collection
a. Awareness of VEO	Full knowledge of various departments of VEO.	Interviews, surveys, questionnaires on extent of knowledge of students, teachers, parents.
b. Distribution of VEO information.	Printed materials, audio-visual materials, etc.	Record of students distribution of materials, mail delivery, film showings to teachers, students, parents.
c. 7th and 8th grade teacher and elementary counselor participation in guidance program.	Survey for knowledge of vocational education programs.	Conduct interviews with 7th and 8th grade teachers. Collect information through questionnaires.[3]

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[3] A poll of 21 teachers and counselors from the St. Louis Metropolitan Area (seven from the inner city) disclosed that 14 of the 21 had never visited a technical high school.

A survey of 400 elementary teachers indicates that teachers knew most about the professions, had some knowledge of sales and clerical, and knew very little about the skilled trades.*

* Lefton, W.M. The Elementary Schools' Responsibility for Today's Vocational Misfits. Unpublished manuscript, 1959.

Objective.

B. TO PROVIDE A HETEROGENEOUS ENVIRONMENT IN TERMS OF CULTURE, RACE, AND ABILITY.

Criteria	Data	Method of Collection
a. Racial quotas.	Numbers of students enrolled by race.	Obtain from enrollment data.
b. Distribution of races by VEO Departments.	Numbers of students enrolled in departments by race.	Obtain from enrollment data.
c. Completions and dropouts by race.	Numbers of students who complete by race. Numbers of students who drop out by race.	Obtain from pupil personnel records.
d. Student information and communication control center.	Significant information broadcast to all students via audio system.	Collect worthwhile information from administration, faculty, and students.

Objective

C. TO EXPAND FACILITIES AND OFFERINGS AT THE O'FALLON TECHNICAL CENTER.

Criteria	Data	Method of Collection
a. Expanded facilities & offerings	Capsule reports of projects completed by department.[4]	Obtain from building plan - instructors, administrators.
b. Correlation of VEO with related Junior College offerings & programs.	Offerings proposed and available in both institutions	Liason committee to review, evaluate and make recommendations.

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[4] These descriptions can be incorporated readily into periodic evaluation reports prepared for dissemination to the Office of Education, St. Louis Board of Education, other urban centers, or the general public.

APPENDIX XI

PROFESSIONAL STAFF COMMITTEE

PROFESSIONAL STAFF COMMITTEE

John E. Anderson
District Assistant
Benneker District

Henry C. Briesemeister
Principal
O'Fallon Technical Center

Charles J. Collins
Assistant Principal
O'Fallon Technical Center

Robert F. Kaintz
Vocational Coordinator
O'Fallon Technical Center

W. Forrest Layne
Project Supervisor
Vocational Education Opportunities

Alfred L. Mack
Vocational Coordinator
O'Fallon Technical Center

David Mahan
Director of Federal Programs
St. Louis Public Schools

Clyde C. Miller
Assistant to the Superintendent
St. Louis Public Schools

Gerald H. Moeller, Director
Division of Evaluation & Research
St. Louis Public Schools

Everett E. Patrick
Director of Guidance Services
St. Louis Public Schools

Alex M. Robson, Coordinator
Vocational Training
O'Fallon Technical Center

Henry T. Rutledge
Vocational Coordinator
O'Fallon Technical Center

Raymond J. Sacks, Director
Vocational, Technical & Adult Education
St. Louis Public Schools

Violet M. Stanton
Vocational Coordinator
O'Fallon Technical Center

King Wientge
Professor of Education
University of Missouri - St. Louis
VEO Evaluation Consultant

APPENDIX XII

ANALYSIS OF 1968-69 ENROLLMENT STATISTICS

Prepared by:

KING M. WIENTGE, Ed. D.
University of Missouri - St. Louis
VEO Evaluation Consultant

The Title III Vocational Education Opportunities program has as one of its major objectives the maintenance of racial balance among freshmen entering the technical program. During 1968-69, enrollment quotas to establish racial balance were set for each district. The program has successfully established this balance as is evident in Table 1, which shows total registration for the O'Fallon Technical Center as of September 1968.

Table 1 - Registration, September 1968

Grade Level		Male	Per Cent	Female	Per Cent	Total	Per Cent
9th	Negro	325	47.3%	179	53.3%	504	49.4%
	White	362	52.7	157	46.7	519	50.6
	Total	687	100.0	336	100.0	1023	100.0
10,11,12	Negro	641	66.8	392	77.6	1033	70.5
	White	319	33.2	113	22.4	432	29.5
	Total	960	100.0	505	100.0	1465	100.0
Total Registration		1647		841		2488	

The 9th grade class is the first freshman class enrolling under the new program. The figures show that 50.6% of this group, or 517, were white students and 49.4%, or 504, were Negro. There is also a balance in the sexes by race with 179 Negro girls or 53.3% registered as compared to 157 or 46.7% white girls. There are 325 or 47.3% Negro male registrants and 362 or 52.7% white males.

In marked contrast to the 9th grade registration is the registration for the 10th, 11th, and 12th grades as indicated in Table 1. These three upper grades include previous full time students who returned to the O'Fallon center under the new program to finish their vocational training. Negro boys registering in the 10th, 11th and 12th grades outnumber white boys 641 to 319, or 66.8% to 33.2%. Negro girls number 392 or 77.6% as compared to 113 white girls or 22.4%. The totals for both sexes show 1033 Negro students and 432 white students or respectively, 70.5% and 29.5%.

By 1971 with the continued registration of racially balanced freshman classes the entire school should have a racially balanced student population.

The holding power of the new VEO program is of critical importance, not only for the new freshman class, but also for the 10th, 11th and 12th grades. Table 2 shows the number of September 1968 registrants who no longer attend the O'Fallon program as of March 1, 1969 and the percentages these losses represent of the original registration. Approximately two-thirds of the school year was completed as of March 1.

Table 2 - Students No Longer Attending as of March 1, 1969

Grade Level	Race	Male	Per Cent Registration	Female	Per Cent Registration	Total	Per Cent of Registration
9th	Negro	21	.8%	9	.4%	30	1.2%
	White	46	1.9	21	.8	67	2.7
	Total	67	2.7	30	1.2	97	3.9
10,11,12	Negro	39	1.6	35	1.4	74	3.0
	White	43	1.7	12	.5	55	2.2
	Total	82	3.3	47	1.9	129	5.2
All Grades	Negro	60	2.4	44	1.8	104	4.2
	White	89	3.6	33	1.3	122	4.9
		149	6.0	77	3.1	226	9.1

There are many factors contributing to students leaving the Vocational Education Opportunities program at the O'Fallon Technical Center. A significant number of the factors have no relationship to student interest or desire to remain in the VEO program; for example, moving out of the city, employment, physical health, entering armed service, needed at home, marriage, pregnancy, etc.

The holding power of the total VEO program at the O'Fallon Center is unusually good as reflected by the total of only 226 or 9.1% of the original registrants no longer attending the program as of March 1, 1969. This indicates that 90.9% of the original registrants are continuing their technical training, a per cent which compares very favorably with the holding power of other St. Louis high schools.

Table 3 portrays current enrollments by departments for the 9th grade and 10th, 11th, and 12th grades. This table indicates by race and sex the original registration, withdrawals, transfers, and current enrollments. The per cent retention in the final column is obtained by dividing the current enrollment by the original registration adjusted for transfers out and transfers in.

An examination of the data in Table 3 shows that in general racial balance was achieved for the 9th grade in the various departments. Striking differences can be noted in many departments when racial balances in grade 9 are compared with grades 10, 11, and 12. The grade 9 balances reflect the new quota system. The grades 10, 11, and 12 balances reflect the 70/30 distribution respectively of Negro-white students which existed in school year 1967-68. Fourteen of the nineteen departments have racial balance in the 9th grade within plus or minus 10%. These include: Aeromechanics, Automechanics, Cabinet-Millwork, Carpentry, Clerical, Commercial Art, Data Processing, Electricity, Plumbing, Printing, Radio-TV, Secretarial, Sheet Metal, and Welding.

The per cent retention for each department is a meaningful comparison and Table 3 illustrates the holding power by department for Negroes and whites by grade level. The holding power for 9th grade students is lower generally than for the three upper grades. This might be expected since the 9th grader has not had previous experience in the vocational area in which he is training.

Table 3 - Enrollment by Department

Grade	Race	Original Registration	Racial Balance	Withdrew & Left Program	Transfers		Current Enrollment	Per Cent* Retention
					Out	In		
01 - ACCOUNTING - Male								
	Negro	10	66.6%	-	-	-	10	100.0%
9th	White	5	33.4	1	-	-	4	80.0
		15					14	93.3
	Negro	17	85.0	-	-	-	17	100.0
10,11,12	White	3	15.0	-	-	-	3	100.0
		20					20	100.0
- Female								
	Negro	40	67.8	2	-	-	38	95.0
9th	White	19	32.2	4	-	1	16	80.0
		59					54	90.0
	Negro	19	70.4	-	-	1	20	100.0
10,11,12	White	8	29.6	-	1	-	7	100.0
		27					27	100.0
02 - AEROMECHANICS - Male								
	Negro	37	51.4	1	2	4	38	97.4
9th	White	35	48.6	1	-	-	34	97.1
		72					72	97.3
	Negro	53	73.6	3	-	1	51	94.4
10,11,12	White	19	26.4	1	1	-	17	94.4
		72					68	94.4
03 - AUTOMECHANICS - Male								
	Negro	44	42.7	4	-	1	41	91.1
9th	White	59	57.3	10	2	1	48	82.6
		103					89	86.4
	Negro	60	46.5	9	-	-	51	85.0
10,11,12	White	69	53.5	20	-	1	50	71.4
		129					101	77.7

$$* \text{ Per cent retention } = \frac{\text{Current Enrollment}}{\text{Original registration + transfers in - transfers out}}$$

Table 3 - continued

Grade	Race	Original Registration	Racial Balance	Withdrew & Left Program	Transfers		Current Enrollment	Per Cent Retention
					Out	In		
05 - CABINET-MILLWORK - Male								
9th	Negro	8	53.3%	1	2	-	5	83.3%
	White	7	46.7	-	2	1	6	100.0
		15					11	91.7
10,11,12	Negro	26	83.9	2	-	-	24	92.3
	White	5	16.1	-	-	-	5	100.0
		31					29	93.5
06 - CARPENTRY - Male								
9th	Negro	14	42.4	-	1	1	14	100.0
	White	19	57.6	-	1	-	18	100.0
		33					32	100.0
10,11,12	Negro	21	53.8	2	-	-	19	90.5
	White	18	46.2	4	-	-	14	77.8
		39					33	84.6
08 - CLERICAL - Male								
9th	Negro	3	100.0	-	-	1	4	100.0
	White	0	-	-	-	1	1	
		3					5	100.0
10,11,12	Negro	31	96.9	1	-	-	30	96.8
	White	1	3.1	-	-	1	2	100.0
		32					32	100.0
- Female								
9th	Negro	60	57.1	4	-	-	56	93.3
	White	45	42.9	8	-	-	37	82.2
		105					93	88.6
10,11,12	Negro	180	82.9	22	-	1	159	87.8
	White	37	17.1	3	-	1	35	92.1
		217					194	88.6
09 - COMMERCIAL ART - Male								
9th	Negro	15	53.6	-	-	3	18	100.0
	White	13	46.4	1	-	-	12	92.3
		28					30	96.8
10,11,12	Negro	33	66.0	2	-	-	31	93.9
	White	17	34.0	2	-	-	15	88.2
		50					46	92.0
- Female								
9th	Negro	5	29.4	-	-	-	5	100.0
	White	12	70.6	-	1	-	11	100.0
		17					16	100.0
10,11,12	Negro	10	52.6	-	-	-	10	100.0
	White	9	47.4	1	-	-	8	88.9
		19					18	94.7
10 - COSMETOLOGY - Female								
10,11,12	White	18	100.0	4	-	1	15	78.9

Table 3 - continued

Grade	Race	Original Registration	Balance	Withdrew & Left Program	Transfers Out	Transfers In	Current Enrollment	Per Cent Retention
11 - DATA PROCESSING - Male								
9th	Negro	10	58.8%	-	-	5	15	100.0%
	White	7	41.2	-	-	1	8	100.0
		17					23	100.0
10,11,12	Negro	29	70.7	2	-	-	27	93.1
	White	12	29.3	-	-	-	12	100.0
		41					39	95.1
- Female								
9th	Negro	32	53.3	1	-	-	31	96.9
	White	28	46.7	4	-	-	24	85.7
		60					55	91.7
10,11,12	Negro	75	77.3	7	-	-	68	90.7
	White	22	22.7	4	-	-	18	81.8
		97					86	88.7
12 - ARCH. DRAFTING - Male								
9th	Negro	32	61.5	2	2	2	30	93.7
	White	20	38.5	3	-	2	19	86.4
		52					49	90.7
10,11,12	Negro	57	78.1	2	1	1	55	96.5
	White	16	21.9	2	-	-	14	87.5
		73					69	94.5
- Female								
9th	White	1		-	-	-	1	100.0
10,11,12	Negro	2	50.0	1	-	-	1	50.0
	White	2	50.0	-	-	-	2	100.0
		4					3	75.0
13 - MACH. DRAFTING - Male								
10,11,12	Negro	24	85.7	-	-	-	24	100.0
	White	4	14.3	-	-	-	4	100.0
		28					28	100.0
14 - ELECTRICITY - Male								
9th	Negro	33	40.2	5	3	-	25	83.3
	White	49	59.8	9	-	2	42	82.3
		82					67	82.7
10,11,12	Negro	74	64.9	-	1	-	73	100.0
	White	40	35.1	3	-	-	37	92.5
		114					110	97.3
16 - MACHINE SHOP - Male								
9th	Negro	26	38.2	1	1	-	24	96.0
	White	42	61.8	4	-	2	40	90.9
		68					64	92.8
10,11,12	Negro	63	58.9	4	-	-	59	93.7
	White	44	41.1	5	-	-	39	88.6
		107					98	91.6

Table 3 - continued

Grade	Race	Original Registration	Racial Balance	Withdrew & Left Program	Transfers Out	Transfers In	Current Enrollment	Per Cent Retention
17 - PLUMBING - Male								
	Negro	7	41.2%	-	-	-	7	100.0%
9th	White	10	58.8	1	2	-	7	87.5
		17					14	93.3
	Negro	19	67.9	3	-	-	16	84.2
10,11,12	White	9	32.1	2	-	-	7	77.8
		28					23	82.1
18 - LETTER. PRINTING - Male								
	Negro	21	41.2	1	2	1	19	95.0
9th	White	30	58.8	5	2	1	24	82.6
		51					43	87.8
	Negro	59	71.1	2	-	-	57	96.6
10,11,12	White	24	28.9	2	1	-	21	91.3
		83					78	95.1
- Female								
	Negro	1	50.0	1	-	-	0	0
9th	White	1	50.0	-	1	1	1	100.0
		2					1	50.0
20 - RADIO-TV - Male								
	Negro	18	41.9%	3	2	-	13	81.3
9th	White	25	58.1	7	1	1	18	72.7
		43					31	75.6
	Negro	20	45.5	2	-	-	18	90.0
10,11,12	White	24	54.5	-	1	-	23	100.0
		44					41	95.3
21 - SECRETARIAL - Male								
9th	White	1		1	-	-	0	
10,11,12	White	1		-	1	-	0	
- Female								
	Negro	41	44.6	1	-	-	40	97.6
9th	White	51	55.4	5	-	-	46	90.2
		92					86	93.5
	Negro	106	86.2	5	2	-	99	95.1
10,11,12	White	17	13.8	-	1	-	16	100.0
		123					115	95.8
22 - SHEET METAL - Male								
	Negro	19	52.8	1	3	-	15	93.8
9th	White	17	47.2	1	2	-	14	93.3
		36					29	93.5
	Negro	8	61.5	-	-	-	8	100.0
10,11,12	White	5	38.5	1	-	1	5	83.3
		13					13	92.9

Table 3 - continued

Grade	Race	Original Registration	Racial Balance	Withdrew & Left Program	Transfers		Current Enrollment	Per Cent Retention
					Out	In		
23 - WELDING - Male								
	Negro	28	54.9%	2	-	-	26	92.8%
9th	White	23	45.1	2	-	-	21	91.3
		51					47	92.2
	Negro	47	85.5	5	-	-	42	89.4
10,11,12	White	8	14.5	1	-	1	8	88.9
		55					50	89.3

Table 4 draws the retention data together and shows the per cent retention for each department by grade 9 and grades 10, 11 and 12, as well as total retention. This data was lifted from Table 3 and rearranged for ease of scanning and comparison.

Table 4 - Retention by Department

Department	9th Enrollment ÷Adjusted Registration*	Per Cent Retention	10,11,12 Enrollment ÷ Adjusted Registration*	Per Cent Retention	Total Enrollment ÷ Adjusted Registration*	Per Cent Retention
Accounting	14/15	93.3%	20/20	100.0%	34/35	97.1%
Accounting,female	54/60	90.0	27/27	100.0	81/87	93.1
Aeromechanics	72/74	97.3	68/72	94.4	140/146	95.9
Automechanics	89/103	86.4	101/130	77.7	190/233	81.5
Cabinet-Millwork	11/12	91.7	29/31	93.5	40/43	93.0
Carpentry	32/32	100.0	33/39	84.6	65/71	91.5
Clericalmale	5/5	100.0	32/32	97.0	37/38	97.4
Clerical,female	93/105	88.6	194/219	88.6	287/324	88.6
Comm.Art,male	30/31	96.8	46/50	92.0	76.81	93.8
Comm.Art,female	16/16	100.0	18/19	94.7	34/35	97.1
Cosmetology	-	-	15/19	78.9	15/19	78.9
Data Proc.,male	23/23	100.0	39/41	95.1	62/64	96.9
Data Proc.,female	55/60	91.7	86/97	88.7	141/157	89.8
A.Drafting,male	49/54	90.7	69/73	94.5	118/127	92.9
A.Drafting,female	1/1	100.0	3/4	75.0	4/5	80.0
Mach.Drafting	-	-	28/28	100.0	28/28	100.0
Electricity	67/81	82.7	110/113	97.3	177/194	91.2
Machine Shop	64/69	92.8	98/107	91.6	162/176	92.0
Plumbing	14/15	93.3	23/28	82.1	37/43	86.0
Printing,male	43/49	87.8	78/82	95.1	121/131	92.4
Printing,female	1/2	50.0	-	-	1/2	50.0
Radio-TV	31/41	75.6	41/43	95.4	72/84	85.7
Secretarial,female	86/92	93.5	115/120	95.8	201/212	94.8
Sheet Metal	29/31	93.5	13/14	92.9	42/45	93.3
Welding	47/51	92.2	50/56	89.3	97/107	90.6
Total all Departments	926/1023	90.5%	1336/1465	91.2%	2262/2488	90.9%

* See Table 3 for per cent retention formula.

The data indicate variability within departments by grade separation. Some of the numbers of students by department are small and unduly influenced by the shift of a few students. The per cent retention of the 19 departments exceeded the mean for the school as a whole. However, no department seems to have lost an unusual number of students.

There is little difference in the holding power of the program for grade 9 as compared to grades 10, 11, and 12. The figures of 90.5% and 91.2% respectively, for grade 9 and grades 10, 11, and 12, are quite close and show that there is no significant difference between the program holding power for the two groups. In other words, freshmen entering from the 8th grade stay in the new program to the same degree as the more experienced students.